

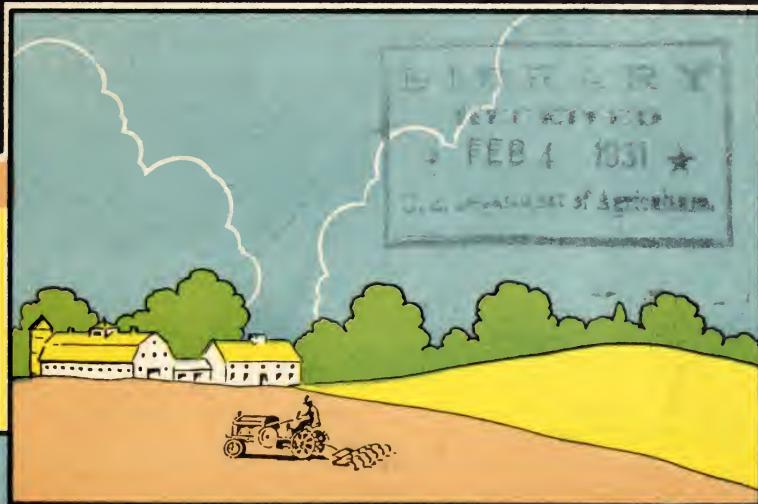
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

12-35

KENDALL & WHITNEY'S

1931 CATALOG



SEEDS - AGRICULTURAL
IMPLEMENT
DAIRY AND POULTRY
SUPPLIES



FEDERAL & TEMPLE STS.
PORTLAND MAINE

For Customers To Consider

ORDERING EARLY

It is suggested that customers consider the advantages of ordering early and as soon as possible after receipt of this, THE 1930 K. & W. CATALOG. Experience of past years brings this suggestion to the fore and when in the rush of the season it is impossible to fill the entire order (because of heavy call on certain articles) such items as are missing will not hold up shipment, but will go forward by separate parcel within a few days.

STOCK SEED

A large part of our seeds are grown for us on contract by special growers, from our own stock, and in locations best suited for their development. Others are secured from strictly reliable sources, and constant effort is made to secure only the best.

ADDRESS AND INSTRUCTIONS

Give name of your post office, county and state, sign your name plainly; also specify means of conveyance preferred—whether by parcel post, express or freight.

FREE DELIVERY OF SEEDS

We will send by parcel post, to any part of the United States, all Vegetable and Flower Seeds quoted in this catalog, at packet, ounce, quarter-pound and half-pound rates, free of expense to the purchaser, excepting heavy seeds such as Peas, Beans, Corn, Clover Seed, Seed Grain, Roots, etc. These are quoted at net prices at our store. Purchasers desiring these by mail are requested to remit an additional amount sufficient to cover postage, at parcel post rates according to zone. Allow two pounds in weight for each quart of Peas, Beans or Corn. Particular attention is invited to this, as, when omitted, the cost of postage will be deducted from the amount received.

SHIPPING

We deliver free to Express, Railroad or Boat. All goods travel at the buyer's risk; our responsibility ceases when we take the carrier's receipt. If goods are damaged, so sign for them and enter claim with the carrier at once.

BAGS

On orders for seed requiring bags the cloth bags are charged for at cost and if returned in good condition, charges prepaid, will be credited at price charged on all except wholesale orders.

REMITTANCE

May be made by Express Money Order, Post Office Money Order or Bank Draft; if stamps or cash send in a Registered Letter. Parties having no accounts with us—who order goods without remittance—must furnish satisfactory references. Portland references preferred.

PRICES

The pricing of all articles in the K. & W. 1930 CATALOG is carried out in good faith and it is our wish that they be maintained, but there are rare cases in which it is impossible to foresee a decline or rise in the producer's charge to us. All PRICES ARE NET and subject to change without notice in such instances of purchase as are beyond our control. Where seeds or equipment are for resale by the retailer, freight or express should be considered and added when quoting to the prospective purchaser.

ALL CORRESPONDENCE ANSWERED PROMPTLY

Telephone Orders Given Immediate Attention. Call Portland—Forest-3953.

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out and we will not be responsible for the crop.

KENDALL & WHITNEY

Telephone Forest 3953

PORTLAND

MAINE

SEEDS OF KINDNESS

SHERE comes a time in the lives of all men and business, when it seems that friends have been sincere and kind. Seeds of kindness, sown over years of fair and foul weather, prove the fertility of this earth and the practicability of those who till its soil, as well as the result—a crop with a profit.

Confidence in the soil, the sower and the yield, are the privilege of the Kendall & Whitney House of Seeds, and by this token, an expression of gratitude is extended as this, the 61st. Annual Catalog, goes to you as a message of service in the Springtime.

Comprising as it does 5000 items, spread over 176 pages, it is hoped that it will be as helpful as intended. Painstaking have been the efforts of its compilers, never forgetting the truth of the statement, or the representation that is made to interest you in the articles described herein.

On its pages you will find a description and, in many cases, illustrations of flower and garden seeds, dairy and poultry supplies, and a complete showing of modern and practical tools for the market gardener, farmer and city resident.

KENDALL & WHITNEY

Unusual Offers

SEEDS IN PACKETS OR OUNCES ONLY

The following may be selected from our catalog, at the prices named, and will be forwarded, postage free, to any part of the United States:

Purchasers remitting \$1.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 25 cents.

Purchasers remitting \$2.00 for seeds (in PACKETS OR OUNCES) may select

additional seeds in packages or ounces to the amount of 50 cents.

Purchasers remitting \$3.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$1.00.

Seeds ordered in quantities larger than one-ounce packages are not to be included in making up the order, neither are plants or bulbs.

Special to Market Gardeners

To market gardeners and users of seed in large quantities we quote special prices. When asking quotations please state the amount of seed which will be needed.

TABLE OF CONTENTS

(See Page 187 and 188 for itemized index)

Flower Seeds (Annuals)	4 to 15
Flower Seeds (Perennials and Biennials)	15 to 16
Plants, Shrubs and Bulbs	16 to 17
Vegetable Seeds	22 to 42
Grass Seed, Grain, etc.	42 to 44
Fertilizers	48 to 49
Hand Tools and Sundries	52 to 57
Poultry Supplies	76 to 91
Dairy Supplies	91 to 106
Insecticides	108 to 112
Tools	115 to 179

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no con-

trol, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

United States Parcel Post Rates (Seeds, plants and bulbs included) (Subject to Change.)	First pound or fraction	Each additional pound or fraction	Packages must not exceed 84 inches (length and girth combined)
Local Rate, Portland.....	\$0.07	\$0.00½	Limit of weight this zone, 70 lbs.
1st Zone, within 50 miles of Portland.....	.07	.01	Limit of weight this zone, 70 lbs.
2d Zone, over 50 and under 150 miles.....	.07	.01	Limit of weight this zone, 70 lbs.
3d Zone, over 150 and under 300 miles.....	.08	.02	Limit of weight this zone, 70 lbs.
4th Zone, over 300 and under 600 miles.....	.09	.04	Limit of weight this zone, 50 lbs.
5th Zone, over 600 and under 1000 miles.....	.10	.06	Limit of weight this zone, 50 lbs.
6th Zone, over 1000 and under 1400 miles.....	.11	.08	Limit of weight this zone, 50 lbs.
7th Zone, over 1400 and under 1800 miles.....	.13	.10	Limit of weight this zone, 50 lbs.
8th Zone, over 1800 miles.....	.14	.12	Limit of weight this zone, 50 lbs.

On Seeds, Bulbs, Plants or Roots not exceeding eight (8) ounces in weight, the postage charge is 1c. for each two (2) ounces or fraction thereof; on Sundries or other Merchandise not exceeding eight (8) ounces in weight, the postage charge is 1½c. for each two (2) ounces or fraction thereof. Seeds, Bulbs, Plants, Roots, Sundries, etc., weighing over eight (8) ounces are sent at zone rates.

If special Delivery is wanted an additional 10c. is required on packages weighing up to two (2) pounds—15c. on packages weighing more than two

(2) pounds and up to ten (10) pounds—20c. on packages weighing more than ten (10) pounds.

If it is desired that a package be given the same dispatch as first class mail it requires an additional 25 cents to the amounts as stated above, which is called a "Special Handling" rate.

If remittance accompanies order, a sufficient amount should be included to cover the extra charges—if ordered to be sent by either of the methods as stated above.



Descriptive List of Flower Seeds

Adverts

Beautiful Flowers and Good Vegetables Result From These Conditions

RICH, sandy loam is the best, although fair results may be obtained from any soil which may be made rich and friable. Results cannot be expected on barren sand, or hard clay soils, nor under trees.

As a soil which does not need enriching is seldom found, fertilizer of some sort is necessary. Well decomposed stable manure is best, but if not available, sheep manure, poultry manure or wood ashes are of great benefit. If commercial fertilizer is used it may be applied at the rate of four to twelve pounds to the square rod, but must be thoroughly pulverized and mixed with the soil.

Good soil and sufficient fertilizer are not enough. The garden must be well plowed or spaded, using care, if the soil is a clay soil, that it is not too wet. When a handful of soil pressed into a ball may be easily crumbled again the conditions are right. After being plowed, the surface should be harrowed, or raked as fine as possible, and kept so until the seeds are planted.

With the soil prepared, the next thing is good seed, for no matter how well everything has been done, without good seed the result will not be a success. Do not forget that every season much good seed is lost because of lack of care in planting. Remember that five things are necessary.

FIRST: A proper and constant degree of moisture. The soil should always be moist, never wet. To secure this cover the seed as soon as it is planted with well pulverized, freshly prepared earth, pressing it firmly over the seed. This firming of the soil is very important, as it brings the particles of earth into close contact with seeds and roots, prevents the drying out of the soil and facilitates quick growth. The best results are obtained in small gardens by laying a board on the row and then walking upon the board, or the back of the hoe may be used; but for truck farms and field crops a roller is equally satisfactory.

SECOND: A proper degree of heat, secured by sowing the seed when the temperature of the soil is most favorable to the germination of the seed of that particular plant. Too high

a temperature is often as detrimental as one too low. The proper temperature for each sort may be learned from a careful study of the following pages and the experience of the most successful gardeners in your vicinity.

THIRD: Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved the necessary air can readily reach the germinating seed, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil and can be learned only from practical experience. In general, seeds of the size of the turnip should not be covered with more than half an inch of earth pressed down, while corn may be an inch, beans an inch to two inches and peas one to three inches deep.

FOURTH: Such a condition of soil that the ascending stem can easily penetrate it and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground and taking care never to sow fine seeds when the ground is wet. Occasionally a heavy or long continued rain, followed by a bright sun, will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that the young plants will be killed. In such cases the only remedy is to plant again.

JUDICIOUS CULTIVATION: Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are young, the better; but as they develop and the roots occupy the ground, cultivation should be shallower until it becomes a mere stirring of the surface. The yield and quality of vegetables have often been decidedly lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for, will give larger returns, in every way more satisfactory, than a much larger one poorly prepared and neglected.

Descriptive List of Flower Seeds

Annuals

These are plants which bloom the first season from seed, and are the most generally grown of all flowering plants. There is no place in the garden where some of them will not grow, and their bright colors are the source of continued enjoyment. A list of the perennials will be found on pages 14-15.

ABRONIA UMBELLATA



Abronia Umbellata

Handsome, trailing annuals, with clusters of sweet-scented flowers resembling the verbena. Fine for baskets or for the garden. Blooms from August until OctoberPer Pkt., 10

ACROLINIUM

An elegant, half-hardy annual, producing beautiful everlasting flowers. Grows about one foot high.

MixedPer Pkt., 10

AGERATUM



Ageratum

Half-hardy, free-flowering annuals, blooming throughout the season. Fine for beds or borders.

Per Pkt.

Fine Mixed. 1 ft.10

Imperial Dwarf Blue. 8 in.10

Perfection Dark Blue. 1 ft....10



Alyssum

ALYSSUM

A hardy annual, about eight inches high, with clusters of small, fragrant flowers. Fine for bedding and bouquets.

Sweet. White; 1 ft. Per Pkt.10

Tom Thumb. Very dwarf; white.Per Pkt. 10

Flower Seeds Sent Free by Mail on Receipt of Price.



ANTIRRHINUM
(Snapdragon)
Giant Varieties

A very showy and half-hardy perennial (used mostly, however, as an annual), about three feet high, flowering well the first season. Sow the seeds early, in pots or under glass. An improvement over the old variety, producing longer spikes and larger flowers.

Per Pkt.

Rose10

Scarlet10

Salmon10

White10

Yellow10

Yellow and Scarlet10

Mixed10

AMARANTHUS

Half-hardy annuals, about 2 feet high, with finely variegated foliage. They are most brilliant on poor soil and in dry seasons.

TricolorPer Pkt. 10

AMMOBIUM ALATUM

A useful everlasting for making dried winter bouquets and a showy border plant, growing freely in any garden soil. Hardy annual.

White. 2 ft.Per Pkt. 10

ARCTOTIS

(African Daisy)

Grows 2 to 3 feet high, blooming from July until frost. Flowers pure white on upper surface, the reverse of the petals pale lilac blue. It delights in a sunny location.....Per Pkt. 10

ASPERULA

A most profuse-blooming, hardy annual, attaining an average growth of one foot, the flowers of which are a beautiful light blue, are very sweet scented, and last a long while in perfection.

1 ft.Per Pkt. 10

ASTER

Very beautiful and popular half-hardy annuals, growing from ten to eighteen inches high. For profusion of flowers and richness of display, the asters are unrivaled. Sow the seed early in the spring, under glass or in pots in the house, and transplant into rich soil, about one foot apart.

ASTER—Continued

Early Varieties

Queen of the Market. Very early, blooming in July. The flowers, while not so large as those of the later varieties, are of good size and on long stems. Mixed Per Pkt. 10

Mid-Season Varieties

Victoria. One of the finest for beds and borders. Grows about twelve inches high and blooms profusely.

Mixed Per Pkt. 10
White "



Peony-Flowered Perfection Aster

Late Varieties

Comet. A variety of great beauty. Grows in pyramidal form thirteen to fifteen inches high, covered with large double flowers with long curled petals. Choicest mixed varieties. Pkt. 10

Carter's White Plume. One of the most magnificent white asters yet produced; height, about fifteen inches. Per Pkt. 10

Betteridge Quilled. Perfectly double quilled flowers of beautiful mixed colors. Per Pkt. 10

California Giant. Flowers of the Crego type. One of the finest for private gardens or florist use. Blossoms of large size with long stems. Per Pkt. 15

Crego. The finest of all comet asters, having immense flowers resembling chrysanthemums. Per Pkt.

Lavender Per Pkt. 10

Pink " 10

White " 10

Mixed " 10

Semple's Branching. A superior and free-flowering class. The flowers are large, with graceful, wavy petals on long stems. Either for cutting or bedding this is one of the most valuable asters. 2 ft. high. Per Pkt.

Lavender Per Pkt. 10

Pink " 10

Crimson " 10

White " 10

Purple " 10

Finest Mixed. All colors " 10

Heart of France. This recent introduction is the largest flowering of the very dark red sorts; plants grow about twenty-four inches high, nicely branched, bearing in September their large, rich, deep ruby-red flowers on long, strong stems; a fine, dark variety. Per Pkt. 15

BACHELOR'S BUTTON

A showy, hardy annual, about two feet high, succeeding well in any soil. Set six inches apart.

Finest Mixed. Per Pkt. 10

Double Blue. Per Pkt. 10



Bachelor's Button
BALSAM

Most magnificent, popular, half-hardy annuals, from one and one-half to two feet in height. Sow the seeds early in frames, and transplant to a well enriched border one foot apart.

Fine Double. Mixed. Per Pkt. 10

Beans (Flowering)

Valuable for use of trellises and arbors, being highly ornamental and free climbers; plants are of strong, quick growth, bearing large sprays of handsome flowers.

Scarlet Runner. Very ornamental, bright scarlet flowers. Per Pkt. 10

White Runner. Similar to above, flowers being white. Per Pkt. 10

BRACHYCOME IBERIDIFOLIA

(Swan River Daisy)

Very pretty, free-flowering, dwarf-growing annual; well adapted to edgings, rustic baskets, or pot culture.

Mixed Blue and White.

½ ft. Per Pkt. 10

INOCULATE THIS
SEED WITH
STIMUGERM



Swan River Daisy

BROWALLIA

Handsome, profuse-blooming annual, covered with beautiful flowers during the summer and autumn months.

Per Pkt.

Elatia Coerulea. Blue; 1½ ft. 10

Alba. White; 1½ ft. 10

Fine Mixed 10

BLUE LACE FLOWER

This pretty annual blooms freely from July to November. The blossoms are pale lavender, and are excellent for cutting, as they last a long time in water. Plants grow about eighteen inches high. Seed may be sown outdoors when the trees are in leaf. Per Pkt. 15

CALENDULA

Free-flowering, hardy annual, growing in any good garden soil, blooming from early summer until frost. 1 to 1½ ft.

Meteor. Double; yellow striped orange. Pkt. 10

Orange King. Deepest orange.Per Pkt. 10

The Ball. Rich, golden orange with light center. Flowers very large on long stems. Per Pkt. 10

Sensation or Campfire. Flowers very large, dark orange with scarlet sheen.Per Pkt. 15

Finest Double Mixed " 10



Calceolaria

CALCEOLARIA

Indispensable for the greenhouse or the flower garden. They succeed in any light, rich soil. Half-hardy perennials.

Choice Mixed Varieties Per Pkt. 25



Candytuft

CANDYTUFT

A well-known, hardy annual, very useful for bedding and bouquets, and also for pot culture.

Giant Hyacinth-flowered or

Improved Empress. A wonderfully improved strain of the popular Empress Candytuft, forming much-branched plants about 18 inches high, each branch terminated by an immense spike of very large individual pure white flowers. Makes a very effective white bed or border, and is invaluable for cutting.Per Pkt. 10

Little Prince. Large heads of pure white flowers. Plants about six inches high. Ounce 40c.

Per Pkt. 10

Crimson. Ounce 35c.Per Pkt. 10

Lavender. Ounce 35c." 10

White. Ounce 35c." 10

Finest Mixed. Ounce 30c." 10

CANARY BIRD FLOWER

A rapid-growing, delicate climber, reaching a height of from ten to fifteen feet. Bright yellow, fringed; exceedingly beautiful foliage. Half-hardy annual. Pkt. 10

CANNA

Handsome foliage plants, growing from three to eight feet high. Highly ornamental on the lawn. Soak the seed in warm water for about twelve hours. Seeds should be sown early in a strong, moist heat.

Finest Mixed. Per Pkt. 10



Canary Bird Flower



Calendula

CENTAUREA

Silver-leaved plants; fine for ribbon borders, baskets, etc.

Candidissima. Thick foliage; ¾ ft. Per Pkt. 10

Gymnocarpa. Graceful white foliage; ¾ ft. " 10

CINERARIA

Well-known favorite, free-flowering plants for the green-house, which may be had in splendid bloom through the greater portion of the year, and from the richness and diversity of the colors are among the most valuable of our early spring flowers; succeed best in light, rich, free and open soil. Greenhouse perennials.

Carter's Brilliant Prize. Choicest varieties. Per Pkt. 25. **Fine Mixed Varieties.** Per Pkt. 25

CHRYSANTHEMUMS—Annual

The annual chrysanthemums are free-blooming, easily grown plants. They have large, daisy-like flowers in a variety of brilliant colors and are fine for cutting.

Double White Per Pkt. 10

Double Yellow " 10

Double Mixed " 10

CLARKIA

A very beautiful hardy annual, about eighteen inches high, blooming from June to September. Set six inches apart. **Fine Mixed.** Ounce 30c. Per Pkt. 10



Clarkia

COBÆA SCANDENS

The most useful of climbers, on account of its rapid growth, fine foliage, and large, bell-shaped flowers, purple in color. In sowing place the seeds edgewise and cover lightly. Pkt. 10 **Cobaea Scandens**

COCKSCOMB

Very singular and attractive, half-hardy annuals, about two feet high. To perfect the flowers they should be sown in the hotbeds and transplanted into rich soil one foot apart.

Mixed. Double Per Pkt. 10

COLEUS

One of the most popular foliage plants. Is very decorative in the flower border, and easily grown from seed, which frequently produces new and distinct varieties. **New Hybrid. Mixed.** Pkt. 15

CONVOLVULUS MAJOR

(Morning Glory)



Morning Glory

A well-known beautiful, climbing annual, suitable for covering arbors, trellises, etc. Blooms from July until autumn.

Fine Mixed. Ounce 15c.

Per Pkt. 10

Japanese. Gigantic flowers, exquisite new colors, magnificent foliage.

Finest Mixed. Per Pkt. 10

COREOPSIS

Showy, hardy annuals about two feet high, succeeding well in any soil. Produces a fine effect when grown in a mass. Blooms from June until September.

Fine Mixed. Per Pkt. 10
Drummond's. Large yellow. Per Pkt. 10

**COSMOS**

Splendid flower for cutting purposes, plants growing five to seven feet high, which are beautiful masses of the most elegant foliage, with hundreds of large, showy blossoms. Both foliage

and flowers are excellent for cutting. Sow seed early in spring and transplant to the garden in June.

Single Early Flowering. Mixed colors. Pkt. 10
Double Early Flowering. Mixed. Per Pkt. 20

CYPRUS VINE

One of the most popular of all summer climbers; flowers small, thickly set in a most beautiful dark-green foliage, forming a striking contrast. Tender annuals. Scarlet. Per Pkt. 10

DAHLIA

Plant in a shallow box or pan early in March or April, transplant carefully and keep the soil moderately moist. When all danger from frost is over set out in the bed or border in the garden. Per Pkt. Finest Mixed. Single. 10
Finest Mixed. Double 10

DIMORPHOTHECA

Aurantiaca (African Orange Daisy). One of the showiest garden annuals; compact, bushy plants with orange-gold long stems. Per Pkt. 10

Dahlia
daisy-like blooms on

ESCHSCHOLTZIA
(California Poppy)

A very showy, hardy annual, about one foot high, blooming from June until September. Produces a brilliant effect; admirable for borders when grown in a mass.

Golden West. Large yellow with orange center.

Per Pkt. 10

Mandarin. Orange and scarlet.Per Pkt. 10

Finest Single Mixed. Pkt. 10

Carter's Carmine King. A splendid new variety, of a beautiful carmine-rose color. Per Pkt. 10



Eschscholtzia

FEVERFEW (Pyrethrum)

Handsome, free-flowering, highly ornamental plants, producing a fine effect in the mixed flower and shrubbery borders. Succeeds in any rich soil. **Double White**Per Pkt. 10
Golden Feather. Yellow foliage. Fine for edging flower beds.Per Pkt. 10

GAILLARDIA

Showy and universally-admired annual. Very beautiful; fine for bedding and bouquets. Flowers two to three inches across, blooming until late in the fall.

Fine MixedPer Pkt. 10

GOURDS

A valuable and highly interesting class of climbing plants. Tender annuals.

Fine Mixed.Per Pkt. 10

GLOBE AMARANTH

A tender annual, about two feet high, very ornamental in the garden. The flowers will retain their beauty for a long time if gathered and dried as soon as they are open. Start early in hotbeds, and transplant one foot apart in the border when the weather becomes warm.

MixedPer Pkt. 10

GLOXINIA

Greenhouse plants, producing richly colored and brilliant flowers. Greenhouse perennial.

Carter's Invincible Prize.

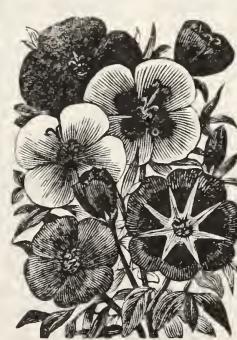
Contains all the best self-colors, crimson, sapphire, purple, ruby, rose, blush violet and white, together with the most beautiful spotted or marbled kinds.

Per Pkt. 25



Gloxinia

INOCULATE THIS
SEED WITH
STIMUGERM



Godetia

GODETIA

Attractive, hardy annuals, deserving more extensive cultivation, especially in the cooler parts of the country. The plants bloom profusely, and bear showy flowers, not unlike an Azalea, of satiny texture in many rich and varied colors. They do best in a rather poor soil; 1 foot.

Fine MixedPer Pkt. 10

GREVILLEA ROBUSTA

A very graceful decorative plant, with evergreen, fern-like foliage. Excellent for table decoration.Per Pkt. 10

GYPSOPHILIA

A free-flowering annual that should be in every garden, for it thrives abundantly, furnishing the loveliest material for bouquets.

Elegans. Hardy annual; pure white. Per Pkt. 10

HELICHRYSUM (Eternal Flower)

A hardy annual, very ornamental in the garden, and very desirable for winter bouquets, as they will retain their form and color for years if gathered and dried when first open.

Double YellowPer Pkt. 10

Double White" 10

Double Scarlet" 10

Double Purple" 10

Double Fine Mixed" 10



Heliotrope

HELIOTROPE

A well-known, half-hardy perennial, particularly prized on account of its delightful fragrance. It is well adapted for bedding or pot culture. Sow the seeds early in spring in pots or in the hothouse, and transplant into the garden when the weather becomes warm.

Finest Mixed. Dark varieties.Per Pkt. 10

HUMULUS (Japan Hop)

Rapid summer climber, resembling the common hop, but being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. It is one of the best plants for covering verandas, trellises, etc., producing grateful shade and being very ornamental. Heat, drought and insects do not trouble it.

Per Pkt. 10

HYACINTH BEAN

Tender, climbing annual, producing clusters of blue and white flowers; 10 ft.Per Pkt. 10

ICE PLANT

A singular-looking, tender annual, with thick, fleshy leaves that have the appearance of being covered with crystals of ice. Start early in pots and transplant into light, sandy soil, in a warm situation.Per Pkt. 10

IPOMOEA (Moon Flower)

The ipomeas are climbers of rapid growth and bear immense fragrant flowers of glistening white, seven to eight inches across. The flowers open at sunset and close the next morning. To hasten germination soak seed in warm water a few hours. Flowers large, white. Per Pkt. 10

KOCHIA CHILDSII (Glowing Ball)

This ornamental annual plant grows quickly from seed sown in the open ground, when the trees are coming out in leaf, and the plants are always of a rounded or globe-like form. The stems are clothed with slender, light green leaves. Early in the fall the ends of the shoots are set thickly with small, bright scarlet flowers, the bushy plants resembling balls of fire. The plants are equally showy planted singly to show the round ball-like form on all sides or grown in continuous rows.Per Pkt. 10

LANTANA

Highly valuable plant of vigorous growth and branching habit, producing brilliantly-colored flowers constantly changing in hue. Very effective, either for pot culture or for bedding.

Fine MixedPer Pkt. 10

LARKSPUR

Very beautiful, showy annuals, producing dense spikes of flowers, which are very decorative, either in the garden or when cut for vases. Set ten inches apart. Blooms from July until frost.

Dwarf Double Rocket. Finest mixed. 1 ft. Pkt. 10

Double Branching. Fine mixed. 2 ft. Per Pkt. 10

LAVENDER

A shrubby plant, blossom of delightful fragrance.Per Pkt. 10

LINUM (Flowering Scarlet Flax)

Grandiflorum Rubrum. Brilliant, dark scarlet. Hardy annual.Per Pkt. 10

LOBELIA

Most excellent and useful plants, free-flowering and of easy culture. Fine for borders, baskets, vases and window boxes.

Gracilis. Fine for hanging baskets, vases, etc.: light blue; trailing.Per Pkt. 10

Crystal Palace. Compact; dark blue; excellent for edging.Per Pkt. 10

LOVE-LIES-BLEEDING

A hardy annual, three to four feet high, with pendant spikes of blood-red flowers. Per Pkt. 10

LOVE-IN-A-MIST (Nigella)

A curious, hardy annual about one foot high, with finely cut leaves and singular flowers.

Mixed.Per Pkt. 10

LUPINUS (Lupine)

This is a very interesting class of plants and of easy culture, producing beautiful leaves and pea-shaped flowers, and should be more generally cultivated. The annual varieties may be sown out in the open in May and as plants grow thin out, leaving about twelve inches between the plants.

Fine Mixed AnnualPer Pkt. 10

MARVEL OF PERU (Four O'clock)

The old and well-known four o'clock. A beautiful plant, with flowers of various colors, making a fine summer hedge when set one foot apart. Grows two feet high.

Fine Mixed.Per Pkt. 10

MAURANDIA

An elegant, half-hardy, climbing plant, blooming the first season if sown early, and is well adapted to the conservatory or trellis work in the garden. Start early in pots, transplant when the weather becomes warm. Continues in bloom through the season.

Barclayana. Rich violet flowers.Per Pkt. 10

MORNING GLORY (See Convolvulus)

MARIGOLD

Extremely showy, half-hardy annual, one to two feet high, well adapted to garden culture, blooming profusely through the season. Set one foot apart. The African varieties are the taller in growth, and produce large self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted. The dwarf-growing kinds make extremely handsome borders, remaining in full bloom until killed by frost.



Marigold

Double African

Orange Prince. Large, deep orange flowers, very showy. About two and one-half feet high.

Per Pkt. 10

Lemon Queen. Similar to the Orange Prince, except in color, which is lemon yellow. Pkt. 10

Double Mixed Per Pkt. 10

Dwarf French

Double Mixed. About one foot high. Per Pkt. 10

Legion of Honor. Single, about nine inches high; golden yellow, with large spot of velvety crimson. Per Pkt. 10

MOURNING BRIDE (Scabiosa)

These beautiful, hardy annuals are in great demand. They grow about two and one-half feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are much in demand. The various shades are very charming, but are equally well adapted for borders or beds, where they display themselves very effectively. Seeds should be sown any time in the spring after danger of frost is past.

Purple Per Pkt. 10

Red " 10

White " 10

Finest Mixed " 10

MIGNONETTE

A well-known, hardy annual, universally grown and esteemed for its delicious fragrance. Sow in light soil one-fourth inch deep and thin to six inches apart in the row.

Mignonette, Sweet.

Large-flowered variety, very fragrant. Per ounce 20c. Per Pkt. 10

Allen's Defiance.

Spikes of immense size, sometimes growing under favorable conditions twelve inches long. Are very fragrant and keep for a long time in water. Per Pkt. 10

Machet.

The finest variety for pot culture; of dwarf growth, with sweet-scented, red flowers. Pkt. 10

White Pearl.

Flowers nearly white; a desirable variety.

Per Pkt. 10



Mignonette

Gabriele.

A variety of dwarf pyramidal growth with large spikes of reddish flowers; fine for pots, or in the open ground. Per Pkt. 10

MIMULUS

Handsome, profuse-blooming plants, with flowers of singular form and brilliant colors, fine for greenhouse or shady situations. Blooms from seed the first year if sown early.

Fine Mixed. Per Pkt. 10

MUSK PLANT

Fine for hanging baskets. Color yellow. Sweet scented. Per Pkt. 10

INOCULATE THIS
SEED WITH
STIMUGERM



NEMOPHILA

Charming hardy, low annual, producing an abundance of extremely delicate and beautiful flowers. Very useful for bedding or for pot culture. Sow early in pots and transplant into a cool, rather moist, location. **Insignis.** Clear, bright blue, white center. Per Pkt. 10

Finest Mixed. " 10

Nemophila

NICOTIANA

Deliciously fragrant flowers, very ornamental, of easy cultivation, excellent for cutting. Half-hardy annuals.

Affinis. White, very fragrant. Per Pkt. 10

Sylvestris. Plants of pyramidal growth, about four feet high. Flowers pure white and very fragrant.

Per Pkt. 10

Sanderae. Branching habit; two feet. Strikingly beautiful plants. Blossoms brilliant carmine-red; delicious fragrance. Per Pkt. 10



Nicotiana

NEMESIA

Dwarf Large-flowering Hybrids. A very pretty annual, which does best in a cool position; the plants grow about a foot high, and the orchid-like flowers are very varied in color, including rose, yellow, blue, orange, etc.

Fine Mixed Varieties. Per Pkt. 10



NASTURTIUM

One of the most popular flowers of the present time, and constantly growing in favor. Is a rapid climber, of easiest culture, bearing beautifully colored flowers in profusion until killed by frost. Nasturtiums are perhaps the most easily grown of all annuals, and are least particular as to soil. The dwarf varieties are particularly adapted for beds and borders, and the tall sorts are serviceable for covering stumps and fences, or for trailing over rocks. Sow the seed where wanted to grow any time in May or June. The best way is to drop about two seeds every 8 inches; this will allow for proper development and save you the labor of thinning out later.

The "K. & W." Mixed Varieties, both Tall and Dwarf, cannot be surpassed for brilliancy and variety of color. The plants, for about three months in the year, produce a lavish profusion of bloom, even through the hottest weather, and a trial of them is sure to give great satisfaction.

NASTURTIUM (Tall)

"K. & W." Mixed Varieties

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.25	.70	.40	.15	.10
Collection of 6 Pkt.: 50				

NASTURTIUM (Dwarf)

"K. & W." Mixed Varieties

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.25	.70	.40	.15	.10
Collection of 6 Pkt.: 50				

SWEET PEAS

Culture

Early in spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it, and plant the seed in the bottom, covering at first only one inch deep. In soils at all heavy, or composed largely of clay, put about one inch of sand in the bottom of the trench and sow the seed on this, covering with more sand. Cover the row with a board to shed the rain and protect the soil from the hot sun, but remove this as soon as the young plants appear.

When the plants are two inches high, cultivate and as they grow gradually fill up the trench. When the plants are about five inches high it is desirable to furnish some support for the vines to run upon, preferably a wire netting firmly supported by stakes to prevent sagging, but strings or brush are often used with satisfactory results.

The roots should not be allowed to become too dry. Water applied thoroughly once or twice a week, preferably early in the morning or in the evening, is usually better than light sprinkling more frequently.

The blooms should be picked before they form pods or the plants will soon stop flowering.

About the only insect that is liable to cause serious injury is the aphis or green fly. Being the color of the foliage, it often does a lot of damage before it is discovered, so be on the lookout for it. Aphine or Black-Leaf 40 are excellent remedies (see page 110) and should be diluted at the rate of one teaspoonful to a quart of water and applied through an atomizer. (See pages 116 and 117.) Aphis are sucking insects and are killed by suffocation only, so that the solution must actually touch the insects before it will kill them. Spray thoroughly under and over the leaves until the solution drips from the vines.

Superb Flowered

SPENCER VARIETIES

The Waved or Spencer class represents a type of sweet pea the original of which, the Countess, is still the best and most popular pink. They are strong growers, bear long stems and very large blossoms, with usually four blossoms to a stem. The standard is large, round, and fluted or wavy on the edges. The wings, too, are large and more or less wavy, but not so much so as the standard.

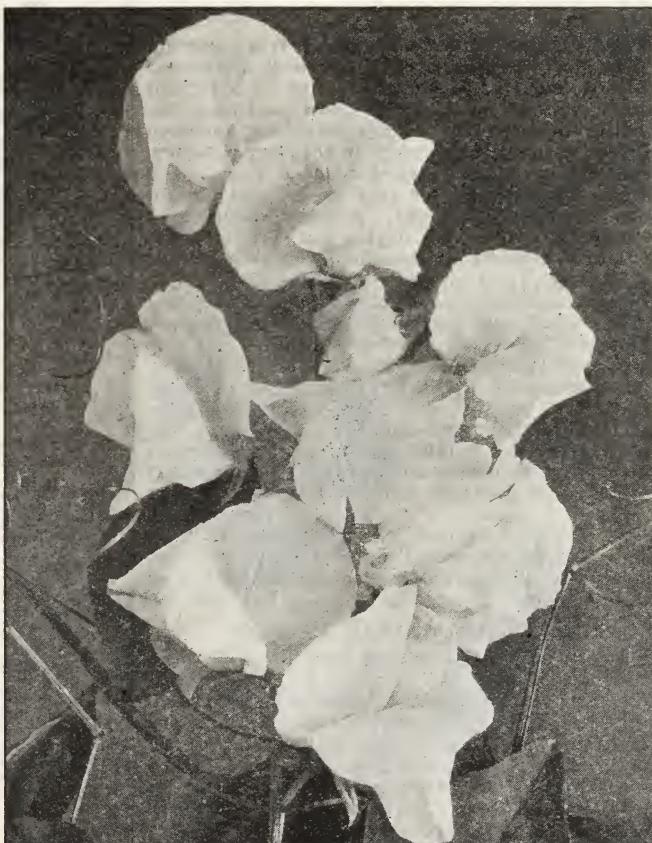
The following named varieties constitute a list of many of the finest strains produced, a majority being recommended by the National Sweet Pea Society.

SWEET PEAS—Continued

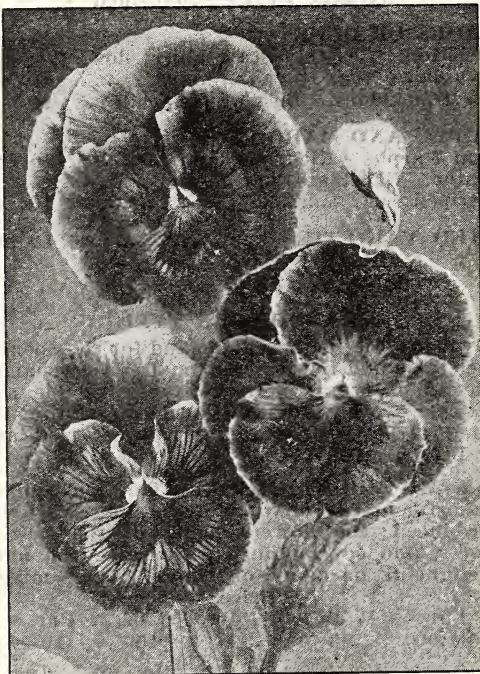
	Pkt.	Oz.
WHITE		
Avalanche. Very large pure white.....	10	20
King White. Giant white; the largest white Spencer type	10	20
White Spencer. Large pure white.....	10	20
Youth. White, edged with soft rose....	10	20
PRIMROSE, CREAM OR IVORY		
What Joy. Primrose yellow shading to cream nicely frilled.....	10	20
LIGHT PINK SHADES		
Mary Pickford. A dainty cream pink with just the faintest suffusion of salmon	10	20
DEEP, BRIGHT PINK		
Brilliant Rose. Bright tyrian rose.....	10	20
Hebe. Giant rosy pink.....	10	20
Pinkie. Rose pink; extraordinary large flowers	10	20
Rosabelle. Giant rosy pink.....	10	20
Sunset. Bright rose.....	10	20
ORANGE AND SALMON		
Idyl. A lovely combination of rich salmon pink on cream base	10	20
Hawmark Pink. Rose pink flushed and shaded with salmon	10	20
fined.....	10	20
Hero. A brilliant clear cerise suffused salmon....	10	20
Melba. Pale salmon	10	20
Miss California. Orange, salmon, cream, pink.....	10	20
Prince of Orange. Enormous flowers of deep orange—red in color.....	10	20
SHADES OF RED		
Crimson King. The largest crimson	10	20
Doreen. Bright carmine, very large	10	20
King Edward. Pure, deep red; very large	10	20
Morse's Sunproof Scarlet. The brightest scarlet Sweet Pea	10	20
Vermilion Brilliant. Intense, bright scarlet.....	10	20
EDGED		
Blue Picotee. White, with blue edge	10	20
Dainty. White, with rose pink edge	10	20
Sunkist. The ground rich cream and the picotee edge of rose clearly defined.....	10	20
LAVENDER SHADES		
Dobbie's Orchid. Large mauve lavender	10	20
Gleneaglet. Immense flowers of pale blue-lavender	10	20

SWEET PEAS—Continued

SHADES OF BLUE	1 lb.	$\frac{3}{4}$ lb.	$\frac{1}{4}$ lb.	1 oz.	Pkt.
Reflection. The bluest of blues, flowers large and waved.....	10	20			
Mrs. Tom Jones. Best of deep blues..	10	20			
PURPLE AND MAROON					
Royal Purple. Rich, deep purple.....	10	20			
Senator. Chocolate, purple and white, striped	10	20			
MIXED VARIETIES					
	\$2.25	\$1.25	.70		
GRANDIFLORA TYPE					
Owing to the increased demand for the Spencer sweet peas, and the fact that many of the named varieties of the Grandiflora type are one and the same, we have discontinued cataloguing the named varieties of Grandiflora sweet peas and will list only the					
"K. & W." CHOICE MIXED. This magnificent assortment is a mixture of the finest varieties produced, the flowers being of the largest sorts, and so combined as to give the most delightful harmony of colors. Fine mixed.					
Price,					
	1 lb.	$\frac{3}{4}$ lb.	$\frac{1}{4}$ lb.	1 oz.	Pkt.
	\$1.00	.55	.35	.15	.10



SWEET PEAS



PANSY

Good results may be obtained from sowing seed in May in a light, cool, but well moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them five times their diameter, and firm soil. Water once a day, except in very dry weather, when they may be watered twice a day. Seed will germinate in about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, they should be transplanted to a distance of one foot apart. Where greenhouse and cold frame facilities are at hand, seed may be sown in July or August and plants protected during winter.

"K. & W." Extra Choice Mixed. This is a mixture composed of the finest varieties of large flowering pansies and for years has been giving splendid satisfaction.Per Pkt. 10
Non Plus Ultra. A mixture of pansies designed for the buyer who wishes his beds of the finest colors and greatest variety possible.

Per Pkt. 15

Odier. Finest blotched.Per Pkt. 10
Madam Perret. A new French strain. Flowers large size, in many colors, especially red, and wine shades.Per Pkt. 20

GIANT TRIMARDEAU PANSIES

A strain of pansies having very large flowers. Per Pkt.

Giant King of the Blacks. Velvety jet black. 10
Giant Blue. Beautiful light blue.10
Giant Yellow. Pure golden yellow.10
Giant Purple. Dark, rich purple.10
Giant White. Pure white; dark eye.10
Giant Mixed.10

PASSION FLOWER

A splendid class of climbers, with curious flowers produced in great profusion; fine for

conservatory or will answer for the garden, flowering freely during the autumn.

Fine Mixed Per Pkt. 10

PERILLA NANKINENSIS

An annual, growing from two to two and one-half feet; stems branching, well covered with an ample foliage of a dark purple, almost black.

Per Pkt. 10

PETUNIA

Favorite, hardy annuals, succeeding well in any rich soil. For the brilliancy and variety of their colors, their abundance of flowers and the long duration of their blooming period, they are indispensable in any garden.

Double Fringed. Extremely double, edges finely fringed, petals fluted and crinkled, unmatched by crumpled velvet, which the flowers resemble.

Per Pkt. 25

Single Fringed. Choicest fringed sorts. Per Pkt. 20



Petunia

California Giants. A strain of incomparable beauty, size and luxuriance. The flowers are exquisitely ruffled or fringed on the edges, and are enormous.Per Pkt. 25
Rosy Morn. Soft carmine-pink, white center; used very extensively for borders, beds or rockeries.Per Pkt. 10
White. Single, large, pure white.10
Balcony Blue. Indigo blue. Flowers very large.15
Fine Mixed. Single varieties.10



PHLOX DRUMMONDI

The flowers are of exquisite beauty, and are greatly admired by all. Their long duration in bloom, combined with their almost unequalled richness of color, make them invaluable in the general flower garden. Hardy annuals.

Pure White.Per Pkt. 10

Pure Deep Scarlet.10

Rose.10

Yellow.10

Crimson.10

Finest Mixed. Oz. \$1.00.10

Phlox

PHYSALIS (Chinese Lantern Plant) Franchetii. An ornamental plant, forming dense bushes about two feet high, producing freely its bright orange-red, lantern-like fruits, which can be cut and dried for winter bouquets. Highly interesting.Per Pkt. 19

PINK (Dianthus)

One of the most popular flowers in cultivation, producing a great variety of brilliant colors and profusion of bloom.

Hedewigi. Flowers very large, and of rich and brilliant color. Hardy annual. Per Pkt. 10

Chinese. Splendid double mixed.Per Pkt. 10

CARNATION

"MARGUERITE."

Very early, and when sown in the spring will bloom in July or August and continue until frost, or may be potted to bloom in the house during the winter. Many of the flowers are double, and are finely fringed and fragrant.

Giant Mixed. Extra large, flowering profusely, in brightest colors.

Per Pkt. 10



Hedewigi Pink

POPPY

Brilliant and showy, hardy annual, growing freely in any garden soil. Sow as early in spring as the weather will permit at intervals for a succession. Barely cover seed; PRESS DOWN FIRMLY, and when up thin to six inches apart. 2 ft.



Admiral Poppy

Peony Flowered.

Resemble a double peony. Mixed. Pkt. 10

Carnation Flowered.

Double fringed flowers. Mixed. Pkt. 10

SINGLE FLOWERING VARIETIES

Admiral. Single, peony-flowered variety. Glistening pure white, with scarlet band around the top; very handsome. Per Pkt. 10

Peacock. Cup-shaped, crimson blossoms, with ring of black at base of the petals; equally good for pots or borders. Per Pkt. 10

SHIRLEY. Beautiful strain of single mixed poppies; bright, delicate colors; fine for cutting.Per Pkt. 10

Tulip. Grows twelve to fourteen inches high, and produces well above the foliage fifty to sixty large flowers of the most brilliant scarlet.Per Pkt. 10

Iceland. Blooms the first year from seed. Colors range from white to orange.Per Pkt. 10

PORTULACA

Very popular, low-growing, hardy annuals, making a most brilliant display in the garden, and very suitable for borders or edgings. Sow early in warm, light, rich soil and thin plants to 4 inches.

Single, All Colors Mixed.Pkt. 10

Double, Finest Mixed. Pkt. 10



Portulaca

PRINCE'S FEATHER

Ornamental plants, with elegant plumes of rich colored flowers.

Large Flowered. Crimson; 2 ft.Per Pkt. 10



Rhodanthe

RHODANTHE

A well-known everlasting; valuable for the decoration of the conservatory and flower garden; fine for bedding or ribboning. The flowers, if gathered when young, make valuable winter bouquets; succeed best in a light, rich soil and a warm, sheltered situation. Half-hardy annual: 1½ ft.

Fine Mixed.Per Pkt. 10

RICINUS

(Castor Bean)

Plants with very ornamental foliage and showy fruit and quite a tropical appearance. With other ornamental-leaved plants, they make a most attractive bed on the lawn, and are also desirable when grown as single specimens. Half-hardy annuals.

Barbonensis Arboreus. Beautiful, large green foliage; 10 ft. Per Pkt. 10

Cambodgensis. Dark foliage: black stem; 9 ft. Per Pkt. 10

Sangdineus. Scarlet fruited; 6 ft.Per Pkt. 10

Zanzibariensis. Immense, dark green foliage; 12 ft. Pkt. 10

Mixed Varieties.Per Pkt. 10



Ricinus

ROSE CAMPION

The rose campion is perfectly hardy and very easily raised from seed. The flowers are produced on long stems, blooming freely throughout the season.

Fine Mixed.Per Pkt. 10



SALPIGLOSSIS

Very beautiful, rich, half-hardy annuals, one and one-half feet high. Start early in the hotbed and transplant to light, warm, rich soil. Blooms from July to September.

Fine Mixed.Per Pkt. 10

INOCULATE THIS
SEED WITH
STIMUGERM

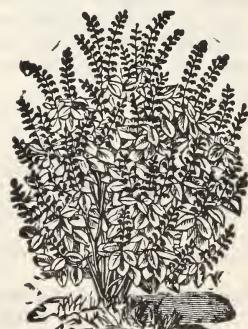
Salpiglossis

SALVIA

Very ornamental, producing tall spikes of brilliant flowers. Start early in hotbeds and transplant two feet apart. Half-hardy annual.

Splendens. Brilliant scarlet flowers.Per Pkt. 10

Bonfire. This variety is one of the finest salvia for bedding yet introduced. The plants grow into very compact oval bushes about two and one-half feet high, and produce long spikes of brilliant scarlet flowers. Pkt. 10



Salvia

SCHIZANTHUS

Tender annual, one to one and one-half feet high, producing quickly such a mass of flowers as almost to hide the foliage. Blooms from August to October. Fine for pot culture. Fine Mixed. Per Pkt. 10

SENSITIVE PLANT

A pretty, curious annual, being so sensitive that the leaves close together at the slightest touch. Per Pkt. 10

SMILAX

A beautiful winter climbing plant, adapted to conservatory. Nothing can excel this plant in beauty of foliage and orange fragrance of the flower. Extensively used for bouquets and floral decoration of every description.

Per Pkt. 10

STOCKS

Half-hardy annual, producing splendid spikes of very rich and beautiful flowers of delightful fragrance. For early flowering sow early in the spring, in pots or in the hotbed, and transplant one foot apart. Blooms from June until October.



Stocks

EARLY LARGE-FLOWERING WINTER STOCKS

Beauty of Nice. Strong spikes, with large flowers of a delicate flesh pink. Per Pkt. 10
Queen Alexandra. New. Rosy lilac. Splendid. Per Pkt. 10

CUT AND COME AGAIN STOCKS

Plants of robust growth and branching habit. If sown early commences blooming in June and continues until frost, producing flowers in September and October, when other varieties have faded. Fine for cutting.
All Colors Mixed. Per Pkt. 10
Princess Alice. White. " 10

LARGE FLOWERING TEN WEEKS STOCKS

White. Ten weeks, double. Per Pkt. 10
Purple. Ten weeks, double. " 10
Scarlet. Ten weeks, double. " 10
Mixed. Ten weeks, double. " 10

SUNFLOWER

Well-known, showy plants; remarkable for their rapid and stately growth and the large size and brilliancy of their flowers.

California. Double, bright yellow flowers. Per Pkt. 10

Mammoth Russian. Very large flowers; single. Per Pkt. 10

New Miniature. An improvement on the miniature. Covered with hundreds of brightest orange flowers. The blooms are of a variety of shades, sizes and shapes of petals. Pkt. 10

ROYAL SWEET SULTAN

Showy, hardy annual, one to two feet high, succeeding well in any soil. The beautiful, sweet-scented flowers are borne on long, stiff stems, making them well adapted for cutting. This is the finest of all Sweet Sultans.
Fine Mixed. Per Pkt. 10

TASSEL FLOWER

A beautiful, half-hardy annual, with small, tassel-like flowers, blooming profusely from July to October.

Scarlet. Per Pkt. 10

THUNBERGIA

Very ornamental, trailing, half-hardy annual, admirably adapted for trellis or rustic work, or for the conservatory.

Fine Mixed. Per Pkt. 10

VERBENA

Well-known and universally popular bedding plant, blooming all summer. Plants grown from seed are more healthy and make larger and hardier plants than those from cuttings. If sown in spring will flower quite early. For best results sow in house or hotbed and transplant.



Candidissima. Pure white. Per Pkt. 10

Verbena

Scarlet Defiance. Brightest scarlet. Per Pkt. 10
Mammoth Finest Mixed. " 10

VISCARIA

Very pretty, profuse-flowering, half-hardy annual, producing a fine effect in beds or mixed borders, and growing readily in any soil.
Fine Mixed. Per Pkt. 10

WALLFLOWER

Very fragrant and ornamental, suitable for background and amongst shrubbery.
Fine Mixed. Per Pkt. 10

WILD GARDEN SEED

This is a mixture composed of some of the easiest growing varieties of annuals and is intended to be sown broadcast, producing a bright effect in places which would otherwise be unsightly and also an abundance of flowers for cutting. In sowing the seed the surface should be stirred with a rake and the seed mixed with 5 to 10 times its bulk of dry sand to get a more even distribution of the seed. Per Pkt. 10

WILD CUCUMBER VINE

A very rapid-growing climber which reaches a height of fifteen or twenty feet during the season. It is covered with clusters of white, sweet-scented flowers, followed by an abundance of ornamental prickly seed pods. It will quickly cover a trellis, pillar or an unsightly building, and will reproduce itself from self-sown seed every year. Soak seed over night in warm water. Hardy annual. Per Pkt. 10

K-W Choice Zinnias

A most splendid class of hardy annuals, and one of the finest summer flowering plants. The flowers are large, handsome, and in a very great variety of colors, blooming throughout the whole season. Start early in pots or under glass and transplant one foot apart.

Giant Double Mixed. Of robust growth, producing large flowers on long stems. Per Pkt. 10



Double Zinnia

Haageana. Double orange, one foot. Per Pkt. 10

Curled and Crested. Large, double flowers, with petals twisted, curled and crested into the most fantastic and graceful forms. Usual range of colors. Per Pkt. 10

Double Dahlia-flowered. The very latest in zinnias. Flowers of mammoth size and in form like a decorative dahlia.

Canary Bird. Primrose. Per Pkt. 20

Crimson Monarch. Best red. " 20

Exquisite. Light rose. " 20

Oriole. Orange and gold. " 20

Mixed. " 20

Hardy Perennials and Biennials

This class of flowers is coming into increased favor each year. The seed may be sown in the spring, or later in July or August. If sown at the latter time, it is well to sow in a shaded, moist place, or to keep the ground shaded and well watered until the seed appears.

ALYSSUM

Saxatile Compacta. Grows about nine inches high, producing a mass of golden yellow flowers. Per Pkt. 10

AQUILEGIA (Columbine)

Grows about two feet high, blooming in May or June. Per Pkt. 10

Mixed.



Double Daisy

CANTERBURY BELLS

Large, bell-shaped flowers, blooming in July. Grows two feet high.

Blue. Per Pkt. 10

White. " 10

Rose. " 10

Mixed. " 10

BELLIS PERENNIS

(Double Daisy)

Fine for bordering. Set six inches apart.

White. Per Pkt. 10

Red. " 10

Mixed. " 10



Canterbury Bells

COREOPSIS

Lanceolata Grandiflora. Has large showy bright yellow flowers—a hardy plant and produced in the greatest abundance from June till frost.

Per Pkt. 10

DIGITALIS (Foxglove)

This is a very ornamental biennial plant, almost three feet high. The racemes of thimble-shaped flowers are often two feet long.

Gloxiniaeflora. Mixed. Spotted flower. Pkt. 10

DELphinium (Larkspur)

One of the finest perennials, growing four feet high, and lasting a long time in flower.

Bellamosa. Dark blue. " 10

Belladonna. Turquoise blue. " 10

Badger's Hollyhock Strain. A collection of light shades in the latest colors. Per Pkt. 15

DIANTHUS (Pink)

Carnation. A magnificent class of popular flowers, very fragrant, and of rich and beautiful colors. Hardy perennial. Per Pkt. 10

GYPSOPHILIA (Baby's Breath)

Delicate, mistlike flowers. Fine for bouquets. Grows two feet high.

Paniculata. White. Blooms the first year, if sown early. Per Pkt. 10

GAILLARDIA

One of the finest perennials, blooming the entire season. Flowers are large, daisy-like, in shades of yellow with brown centers.

Mixed. Per Pkt. 10

MYOSOTES (Forget-Me-Not)

Low-growing plants, preferring moist, shady places. Most effective grown in masses.

Victoria. Dwarf, sky blue. Per Pkt. 10

Mixed. " 10



Forget-Me-Not

HOLLYHOCK

Showy perennials, about four to five feet high.

Double Mixed. Extra choice. Per Pkt. 10

Single Mixed. " 10

HONESTY

A hardy biennial, two feet high, flowering the second year in May and June. The flowers are succeeded by singular semi-transparent seed vessels that are quite ornamental and may be kept for a long time. Per Pkt. 10

LUPINE.—Perennial mixed. Per Pkt. 10



Hollyhock

PERENNIAL PHLOX

One of the most beautiful of the perennials, growing two to three feet high, with large heads of flowers. Per Pkt. 10

PERENNIAL POPPY

Iceland. Blooms the first year from seed. Colors range from white to orange. Pkt. 10
Oriental. Very large bright scarlet flowers. Fine for borders and amongst shrubbery. Per Pkt. 10

POLYANTHUS

Grows about one foot high, blooming in June and July. Per Pkt. 10

SHASTA DAISY

A hardy perennial, lasting in bloom for a long time. Flowers are white, and from one to four inches across. Per Pkt. 10

SWEET ROCKET

An early flowering perennial, about eighteen inches high, with fragrant purple and white flowers. Per Pkt. 10

SWEET WILLIAM

One of the most showy of the perennials, bearing large trusses of flowers.

Sweet William

White	Per Pkt. 10
Pink	" 10
Crimson	" 10
Mixed	" 10

Vegetable Plants

CELERY PLANTS—Ready June 1st to 15th. Golden Self-Blanching White Plume

Boston Market

TOMATO PLANTS—Ready May 15th to 20th. Earliana Dwarf Champion Red Cross

John Baer Jewel Perfection

Early Avon Bonny Best

and other standard varieties.

One dozen in each box.

CABBAGE PLANTS

Early summer varieties. Ready May 15th to 20th.

For winter crop. Ready June 15th to 20th.

CAULIFLOWER PLANTS

Ready May 15th to 20th.

RHUBARB ROOTS AND ASPARAGUS ROOTS

Ready in April.

Bedding Plants

GERANIUMS in 3-inch and 4-inch pots.

CANNAS and **FUSCHIAS** in 4-inch pots.

HELIOTROPE, **CALENDULAS** and **LOBE-**

LIAS in 3-inch pots.

Potted plants and plants in baskets and boxes cannot be sent by mail.

Flower Seedlings

Aster	Pinks	Petunia
Stock	Pansies (choice strain)	
Marigold	Phlox	Snapdragon
Zinnia		Verbenas

Hardy Plants and Shrubs

These can be supplied on short notice. The demand for hardy perennials is continually on the increase, as they bloom year after year with only slight care. To

insure the plants reaching the purchaser in the best possible condition they will be sent direct from the nurseries. The following is a partial list of what we can supply:

HARDY PERENNIALS

Asters Canterbury Bells Foxglove Hollyhock Oriental Poppies Sweet William
Baby's Breath Columbine Gaillardia Larkspur Phlox

Price, 30 cents each.

Peonies, price, 50 cents to \$2.00 each.

HEDGE PLANTS

Japanese Barberry, 10 to 12 inches, \$18.00 per 100; 12 to 15 inches, \$22.00 per 100.

ORNAMENTAL SHRUBS

Weigelia	\$.75	Syringa	\$.60	Golden Leaved Elder	\$.60
Forsythia	.60	Spiraea	.60	Bush Roses	.75
Honeysuckle	.60	Lilac	.60	Climbing Roses	.75
Hydrangea	.60	Bridal Wreath	.60		

VINES AND CLIMBING SHRUBS

Woodbine	\$.60'	Clematis Paniculata	\$.60	Honeysuckle	\$.60
Boston Ivy	.60	Clematis Jackmanni	1.00	Wistaria	1.00
Dutchman's Pipe	1.50				

ESTABLISHED 1858



Forest 3953

INCORPORATED 1896

Kendall & Whitney
Federal and Temple Streets
Portland, Maine

ORDER SHEET FOR SEEDS, ETC.

Date..... 19.....

Name.....

Amount Enclosed

Post Office.....(R. F. D.).....

Express Office (If different from Post Office)

Freight Station

State

State

Send Goods by

State.....

YES To avoid delay in filling the order, please let us know if you...

for any varieties which may be out of stock.

Quantity **Names of Articles Ordered**

In making out your order, please give the price
Carried forward

☒ In making out your order, please give the price ☒

Carried forward

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out and we will not be responsible for the crop.

Kendall & Whitney Superb Gladiolus

There is no other Summer flowering bulb that is enjoying so great popularity as that of the Gladiolus. Their adaptability to garden decoration or to use as cut flowers during the Summer and early Autumn is surpassed by no other flower. They are not only showy in the garden but when cut with the first flower open, will last for 10 days in the house. They thrive in almost any good garden soil but better results may be had if soil is well prepared and enriched with some of our pulverized manures. Great improvements have been made in the size, color and beauty of these flowers. Our list comprises the best of recent introductions as well as the most popular of the standard varieties. Plant bulbs 4 inches deep and from 4 to 6 inches apart.

These Gladiolus Priced: Each, 10c; Doz., 65c **Schwaban.** Pure canary yellow, purple throat. Medium.

Alice Tiplady. Large saffron orange. Early. **These Gladiolus Priced:** Each, 12c; Doz., \$1.00 **Giant Nymph.** Light pink, tall spike. Early. **Baron Jos. Hulot.** Very dark blue. Medium early.

Halley. Salmon pink, creamy marking. Early.

Herada. Large mauve with deeper markings. Medium.

Ida Van. Salmon red, deeper throat. Early.

Los Angeles. Soft salmon pink with cerise feathers. Medium.

Louise. Deep lavender blooms of wonderful shade and texture, crimson blotch. Medium.

Mrs. Frank Pendleton. Fine clear pink, carnine blotch. Medium.

Opalescent. Delicate lavender, fine spike, large. Medium.

Peace. Pure white with lilac throat. Late.

Scarlet Princeps. Pure spectrum red, fine spike. Early.

WABAN WONDER MIXTURE

Twenty Bulbs in a box. No two alike. Full range of colors. If bought separately would cost more than double.

Per box, \$1.00

Carmen Silva. Fine spike pure white. One of the best. Late.

Crimson Glow. Rich crimson scarlet. The best red. Medium.

Golden Measure. Tall spike, deep yellow, Medium.

Marietta. Light salmon orange, deeper blotch. Medium.

Mrs. F. C. Peters. Rosy lilac with crimson blotch. Late.

Caladium and dahlias ordered by mail are subject to an extra charge of ten cents per dozen for postage. All other bulbs ordered by mail are subject to an extra charge of five cents per dozen for postage.

Dutch Bulbs

For Winter and Spring Blooming

These bulbs are imported directly from Holland growers, from whom we have had bulbs for more than twenty years, so we are assured of the quality. Our assortment will consist of hyacinths, tulips, narcissus and crocuses, and will be ready for shipment about October 1st. Send for our bulb list giving directions for growing and prices. No class of plants is easier to grow successfully than these bulbs, so do not fail to enjoy their flowers during the winter and spring months.

Genuine Chinese Cinnamon Vine

Most Beautiful, Most Fragrant, and Easiest Grown of All Climbers

Price: 10c Each; \$1.00 per Doz., Postpaid

Caladium Esculentum. Eight to ten inches in circumference. Each, 15c; per dozen, \$1.50.

Madeira Vine. Each, 5c; per dozen, 50c.

Gloxiniyas, Assorted Colors. Each, 30c; per dozen, \$3.25.

Tuberose. Large bulbs. Each, 8c; per dozen, 75c; per 100, \$5.50.

Dahlias. Selected for variety of color, form, size and perfection of bloom. All bulbs started, and ready for early flowering. Stock for shipment, May 15th to June 1st. Each, 20c; per dozen, \$2.00.

Choice Named Varieties. Price on application.

Rock Garden Seeds

Rock gardens are yearly increasing in popularity. One of the most interesting points of the rockery or rock garden is that each of us may build it according to our own ideas, providing it is correctly built as to drainage and the proper placing of the rocks in order to keep the soil in place.

Before building the rock garden, the location should be selected in an open sunny place or one in partial shade, according to the variety of plants desired. In either location the ground must be well drained.

The next step is to plan the rockery as to size and shape. Do not use too much stone, and use stones of a good size. Place the stones so that they will keep the soil from washing when watering or during heavy rains.

Place the plants in the pockets of soil or in the open spaces between the rocks. Be sure, however, that the soil is firm around the roots of the plants.

Below will be found a list of plants we offer suitable for rock garden planting.

	Per Pkt.	Per Pkt.	
Achilla. The Pearl, double white, 2 ft.....	.10	Cerastium tomentosum, dwarf white,	
Alyssum saxatile, yellow, 1 ft.....	.10	4 in. ....	.10
Anemone pulsatilla, violet purple, 9 to 12 in. ....	.10	Dianthus deltoides, brilliant carmine,	
Aquilegia caerulea, blue, 2 ft.....	.10	8 in. ....	.15
Aquilegia, long spurred, mixed, 2 ft.....	.10	Gypsophila ripens, white, 8 in.....	.15
Arabis alpina, white, 6 in.....	.10	Myosotis Palustris, blue, 1 ft.....	.10
Armeria Formosa, deep pink, 1 ft.....	.10	Primula Vera, mixed, 6 in.....	.10
Aster, alpinus, blue, 1 ft.....	.15	Poppy Iceland, mixed, 1 ft.....	.10
Aubrieta Deltoides lavender, blue, 4 in. ....	.15	Sedum Acre, yellow, 6 in.....	.10
Candytuft sempervirens, white, 1 ft.....	.10	Staicee Lalifolea, lavender, 18 in.....	.10
		Viola Cornuta, mixed, 6 in.....	.10

VARIETIES OF PARTICULAR MERIT

Sweepstakes Ensilage Seed Corn

This ensilage corn has repeatedly yielded from 15 to 25 tons of ensilage to the acre. Nearly every stalk has two large ears, which add much to the value of the ensilage. Since we have been selling this corn our sales have increased year by year, which proves that those who want the best feel sure that they have found it in Sweepstakes.

All of our Sweepstakes corn has been screened over a $\frac{3}{8}$ -inch screen, which insures the user all large vigorous kernels, which will germinate 90 per cent or better.

To obtain the best results the corn should be planted in rows $3\frac{1}{2}$ feet apart, and 1 kernel in a hill, not nearer than 10 inches, which will require 12 quarts to the acre.

Bender's Surprise Musk Melon.

A new variety which has become very popular in the East. It is medium early, of large size, and of superior keeping qualities. Color of

flesh, salmon. Price: Pkg., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Peerless, or Ice Cream Melon. This is one of the best for growing in the North on account of its earliness. It is of medium size, rind thin, color light green, mottled, flesh bright scarlet and very sweet. Price: Pkg., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.



The President Pea. A new, early dwarf pea similar to the Laxtonian but about two days later. The vine is handsome and the pod is large and dark green. Price: 1 lb., 45c; 2 lbs., 85c; 14 lbs., \$4.75.

Blue Bantam Pea. To those who wish a large podded early pea which does not grow as tall as the Gradus we recommend the blue bantam. The vines are about eighteen inches high, make a vigorous growth, and the pods are well filled, averaging nine or ten peas to

VARIETIES OF PARTICULAR MERIT—Continued

the pod, while the quality is the best. Prices: **1 lb., 45c; 2 lbs., 85c; 15 lbs., \$4.75.**

Carter's Early Eight Weeks Pea. This is a very hardy, vigorous growing dwarf variety. It more nearly fills the requirements of a large-podded, smooth pea than any other variety yet introduced. It is extra early, being several days in advance of all the early wrinkled varieties. It is of good quality, being far superior to the usual run of extra early sorts. For private garden use it is of exceptional merit. Price: **1 lb., 35c; 2 lbs., 60c; 14 lbs., \$3.50.**

Marglobe Tomato. A new disease resistant tomato, second early in maturity, fruit large, smooth, globular and nearly coreless. A fine market garden variety. Price: **Pkg., 10c; oz., \$1.00.**

Sutton's Magnum Swede Turnip. Is without doubt the finest type of purple-top Swede turnip that can be grown for general purposes. Its feeding value is high, the roots containing 12.5% dry matter, and the yield per acre is very heavy. Price: **Pkg., 5c; oz., 15c.; 1/4 lb., 50c; lb., \$1.50.**

Detroit Beet. Special Market Gardener's Strain. Exceptional care is exercised in selecting the best roots; great care is also exercised in growing the finest seed possible to satisfy the most particular market gardeners. Price: **Pkg., 10c.; oz., 20c; 1/4 lb., 60c; lb., \$2.00.**

Sutton's Prize Winner Mangel. Sutton's Prize Winner is the heaviest cropping Yellow Globe Mangel in existence. This variety may be relied upon to yield a profitable return on practically every class of soil that is capable of growing Mangels, and when stored in good condition the roots keep sound until the following summer. Analysis has shown that the roots contain as much as 6.53 per cent of sugar and 12.21 per cent of dry matter, and as the weight of the crop far exceeds that of other varieties it will be seen that Sutton's Prize Winner produces the greatest amount of dry (or feeding) matter per acre of any Mangel. A yield of over forty-eight tons per acre has been obtained from this Mangel. Price: **Pkg., 10c.; oz., 20c.; 1/4 lb., 50c.; lb., \$1.50.**

Extra Early Copenhagen Market Cabbage. This is an improved strain of this popular variety, having all of its good points, and in addition

is five days earlier. Price: **Pkg., 10c.; oz., 60c.; 1/4 lb., \$2.00.**

Brittle Wax Bush Beans. An early round podded wax bean, brittle and stringless. Price: **1/2 lb., 20c.; 1 lb., 35c.; 2 lbs., 60c.; 8 lbs., \$2.00.**

Golden Sunshine Sweet Corn. About seven days earlier than Golden Bantam, with ears about an inch longer and with twelve rows. Price: **Pkg., 10c.; 1/2 lb., 30c.; 1 lb., 50c.; 12 1/2 lbs., \$4.50.**

Early Fortune Cucumber. We recommend the Early Fortune as one of the most desirable cucumbers on the market. The quality is excellent, and the flesh is thick, with few seeds. The dark green color and cylinder shape make it most attractive. Price: **Pkg., 10c.; oz., 20c.; 1/4 lb., 60c.; lb., \$2.00.**

White Wonder Cucumber. This is a medium-sized variety of good quality. The point that distinguishes it from other cucumbers is the color, which is white, making it very attractive. Price: **Pkg., 10c.; oz., 20c.; 1/4 lb., 60c.; lb., \$2.00.**

Arlington Thick-Leaved Dandelion. A variety much esteemed by market gardeners because of the thickness of the leaf and dark green color. Price: **Pkg., 15c.; oz., \$1.50.**

New York, or Wonderful Lettuce. One of the best summer lettuces, as it is slow to run to seed and is a sure header under trying conditions. The outer leaves are green, the inner ones blanch to a creamy white, and are crisp and tender. Well worth a trial. Price: **Pkg., 10c.; oz., 30c.**

Ideal Market Pole Beans. The earliest pole bean we are acquainted with, ready for the market with the dwarf varieties, also one of the most productive. Long green stringless pods grown in immense clusters, pod five inches in length. Price: **1/2 lb., 30c.; 1 lb., 50c.; 2 lbs., 90c.**

Onward Pea. A very distinct new mid-season variety, coming just ahead of Telephone. A heavy crop. Three feet in height, pods four inches in length of a deep green color. One of the best peas of recent introduction. Price: **1 lb., 50c.; 2 lb., 90c.**

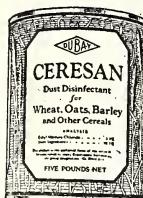


SEED DISINFECTANTS

Control Seed-borne Diseases of Farm Crops
 Stimulate Germination - Improve Stands
 Generally Produce Increased Yields of Higher Quality

CERESAN

for seed treatment of small grains



PRICES	
8 oz.	.50
1 lb.	.75
5 lbs.	3.00
25 lbs.	12.50
100 lbs.	49.00
300 lbs.	144.00

Ceresan has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smuts of barley and oats and covered kernel smut of sorghum. It is the only dust treatment which has successfully controlled these destructive grain diseases. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat, rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use.

SEMESAN BEL

for seed white and sweet potatoes



Simply mix, dip, drain, dry and your seed potatoes are ready for planting. Semesan Bel may be used on either whole or cut seed pieces. Semesan Bel effectively controls such seed-borne disease organisms as scab, rhizoctonia and black-leg. By controlling these diseases, germination is generally increased, stand improved and the resultant crop bigger and of better quality. One pound treats 16 to 20 bushels of seed. Du Bay Semesan succeeds the products sold as Du Pont Semesan Bel and Bayer Dipdust.

PRICES	
4 oz.	.50
1 lb.	1.75
5 lbs.	8.00
25 lbs.	31.25
100 lbs.	120.00
300 lbs.	345.00

SEMESAN JR.

for seed field and sweet corn



PRICES	
4 oz.	.50
1 lb.	1.75
5 lbs.	8.00
25 lbs.	31.25
100 lbs.	120.00
300 lbs.	345.00



PRICES	
2 oz.	.50
1 lb.	2.75
5 lbs.	13.00
25 lbs.	56.25
100 lbs.	220.00
300 lbs.	645.00

SEMESAN

for flower and vegetable seeds

Semesan may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to disease organisms that may be on the seed. Semesan is such a powerful and effective disinfectant that seed treatment with it is ridiculously low in cost, ranging from $\frac{1}{4}$ c. to 1c. per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off and such devastating gladiolus diseases as hard rot and scab. Du Bay Semesan succeeds the products sold as Du Pont Semesan and Bayer Uspulun.

Du Bay Seed Disinfectants, like many agricultural chemicals, are poisonous in nature and owing to present Postal Regulations cannot be sent through the mails but must be sent by express or freight.

Treat All Seeds Before Planting with Du Bay Disinfectants

Inoculate

ALL LEGUMES

Alfalfa, All Clovers, Soy Beans, Cow Peas, Vetch, Peas, Beans,

Peanuts with

NOBBE-HILTNER PROCESS

NITRAGIN

TRADE MARK REGD. U.S. PAT. OFF. DEC. 5, 1898 NO. 32212

All Legume
Germs Are
Perishable

To Protect You
NITRAGIN Cans
Stamped With
Expiration Date

Legume Germs
Die Rapidly
When Dried

Authorities
Recommend
Inoculating
With Water

THE ORIGINAL LEGUME INOCULATOR

Guaranteed Fresh Each Year—Leads in High Germ Count

For profitable results, Agricultural Colleges advise inoculation for all legume seed, because it pays well in producing larger quality yields. NITRAGIN inoculated legumes draw their nitrogen from the air—not the soil—with billions of fresh, efficient nitrogen-gathering germs. It's fresh each year—it's DATED, and leads in High Legume Germ Count. Quality inoculation is the cheapest legume crop insurance known.



NITRAGIN PRICES

Alfalfa, All Clovers	Peas, Vetch, Beans, Austrian	Soy Beans and Cow Peas	
Size	Price	Size	Price
1/4 bu.....	\$.40	1 bu.....	\$.40
1/2 bu.....	.60	2 bu.....	.70
1 bu.....	1.00	5 bu.....	1.50
5 bu.....	4.75	10 bu.....	2.50
<i>When ordering always specify kind of seed</i>		<i>When ordering always specify kind of seed</i>	
<i>3 1/2 bu.... 1.80 5 bu..... 2.50 *Also called "100 lb. size."</i>		<i>1 bu..... \$.40 2 bu..... .70 5 bu..... 1.50 10 bu..... 2.50</i>	

Garden Nitragin—Garden Size—

Peas, Beans, Sweet Peas

Inoculates from 1 ounce to 8 lbs. seed. Price \$.25
IMPORTANT: When ordering NITRAGIN, always be
sure to state kind of legume seed you wish to inoculate.
Nitragin Has Served the American Farmer Since 1898

Mixing Nitragin with Seed

Legume Germs die rapidly when dried. NITRAGIN, containing between 30%—40% moisture, will readily stick to the seed without adding water, and give inoculation. However, for best results, the preferred practice, recommended by The Nitragin Company and Agricultural Authorities is to use water when mixing legume culture with seed.

STIMUGERM

LEGUME INOCULATION

A Seed and Soil Inoculant
That Increases Crop Production
and Greatly Improves the Soil

Soil and crop experts agree that for best growth, and to put atmospheric nitrogen in the soil, it will pay all farmers to inoculate all legumes, even where they are at present successfully grown. The cost is trivial when compared with the profit it will bring you. Legumes are clovers, peas and beans, alfalfa, soy beans, vetches and other plants that grow their seeds in a pod. Their roots are the home of bacteria that draw fertility-building nitrogen from the air and store it in swellings on the roots, called nodules. These nodules not only feed nitrogen to the crop they are on, but rot away in the ground and supply valuable nitrogen to the soil for future bumper crops of corn, wheat, cotton, oats, fruits, etc.

PRICES

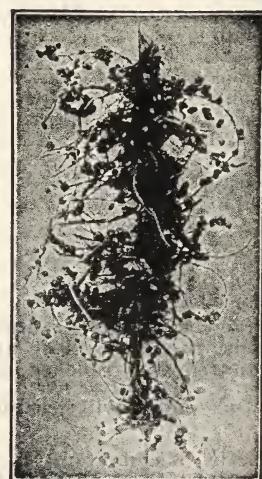
Small Seed Legume Varieties

(Alfalfa, Clovers, Sweet Clovers)
1/4 bushel size retails at.....\$.35
1/2 bushel size retails at..... .60
1 bushel size retails at..... 1.00
2 1/2 bushels size retails at.... 2.25

Large Seed Legume Varieties

1/2 bushel size retails at.....\$.35
1 bushel size retails at..... .60
2 bushels size retails at..... 1.10
5 bushels size retails at..... 2.25

Garden size for garden peas, beans and sweet peas. Special
composite culture, 25c.



Roots like this mean bigger
yields—better soil.



A General List of Vegetable Seeds

We forward seeds by Mail, Express or Freight as the purchaser may wish. When ordered by mail add postage for beans, corn and peas at the rate of eight cents per pound to catalog prices, and for larger shipments by mail, see Parcel Post rates on page 2 of cover.

Valuable Table for Planting

Name of Vegetable.	When to Plant.		Depth to Plant. Inches.	Distance Apart. Inches.	Time of Maturity.
	Hotbed.	Open Ground.			
Asparagus		April or May	1	Transplant 12 x 36	3d year from roots
Beans, Pole		May and June	2	Poles 36 x 36	August to frost
Beans, Dwarf		May to July	2	Thick drills, 24 apart	45 days
Beets		May to July	1	Thin to 5 x 15	50 "
Brussels Sprouts	March	May and June	1/2	Transplant 12 x 18	150 "
Cabbage, Early	March	April and May	1/2	Transplant 18 x 24	100 "
Cabbage, Late		June	1/2	Transplant 24 x 36	130 "
Carrot		May and June	1/2	Thin to 5 x 15	100 "
Cauliflower	April	May and June	1/2	Transplant 24 x 36	100 "
Celery	March	May	Barely cover	Transplant 2 x 4, in flats	170 "
Corn, Sweet		May to June	{ 1 Early 1 1/2 Late	{ Drills 10 x 30 Drills 12 x 48	60 to 90 days
Cress		May to July	1/4	Thin to 3 x 12	40 days
Cucumber	March	May to July	1/2	Hills 48 x 48	50 to 75 days
Dandelion		May	1/4	Thin to 6 x 12	Following spring
Egg Plant	April	June	1/2	Transplant 36 x 36	135 to 150 days
Endive		June to August	1/4	Transplant 12 x 12	45 days
Kale		June to August	1/2	Transplant 12 x 18	150 "
Kohl-Rabi		May to July	1/2	Thin to 6 x 18	110 "
Leek		April and May	1	Transplant 5 x 12	100 "
Lettuce	March	April to August	1/4	Transplant 12 x 12	25 to 60 days
Melons, Musk	April	May and June	1	Hills 60 x 60	120 days
Melons, Water		May and June	1	Hills 96 x 96	110 "
Onion		April and May	1/2	Thin to 5 x 18	100 to 150 days
Parsley		April and May	1/2	Thin to 6 x 12	45 days
Parsnips		April and May	1/2	Thin to 5 x 18	140 "
Peas		April to July	3	Thick rows, 24 apart	40 to 80 days
Pepper	March	June	1/2	Transplant 18 x 24	135 to 160 "
Potato		April to July	{ 2 Early 5 Late	12 x 36	90 to 130 "
Pumpkin		June	1/2	Hills 48 x 72	115 days
Radish	March	April to Sept.	1/2	Thin to 2 x 12	25 to 45 days
Salsify		May	1/4	Thin to 4 x 18	Oct. through winter
Spinach		April to July	1	Thick rows, 12 or 15 apart	30 to 40 days
Squash		June	1	Hills 48 x 72	60 to 130 "
Tomato	March	June	1/4	Transplant 36 x 36	100 to 150 "
Turnip		April to August	1/2	Thin to 4 x 18	60 to 75 "

Asparagus

Sow early in May, thinly, in rows one inch deep and two feet apart. The next season plant in drills, two inches deep and two feet apart, spreading the roots well out in ground thoroughly manured and trenched, at least two feet deep.

One ounce will produce about 200 plants; 4 to 5 pounds to the acre.

Martha Washington. A variety as nearly rust proof as possible. The plants are vigorous and produce thick shoots of a rich, dark green color, somewhat purple at the tips.....

Asparagus Roots. Two years old, per 100, \$2.00.

Pkt. Oz. 1/4 lb.

.10 .30 1.00

Beans---Dwarf or Bush

A succession of sowings can be made from the first week in May until August. Plant in drills about two inches deep, and from eighteen inches to two feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted; the plants should be about three inches apart. Frequent pickings insure a more prolonged bearing season. Avoid jerking the plant, as this frequently disturbs young feeding roots. Use the finger nails to sever the stems. Do not pick when bushes are wet, as this may cause blight and rust. For succession in the home garden plant thirty feet of row every other week up to August.

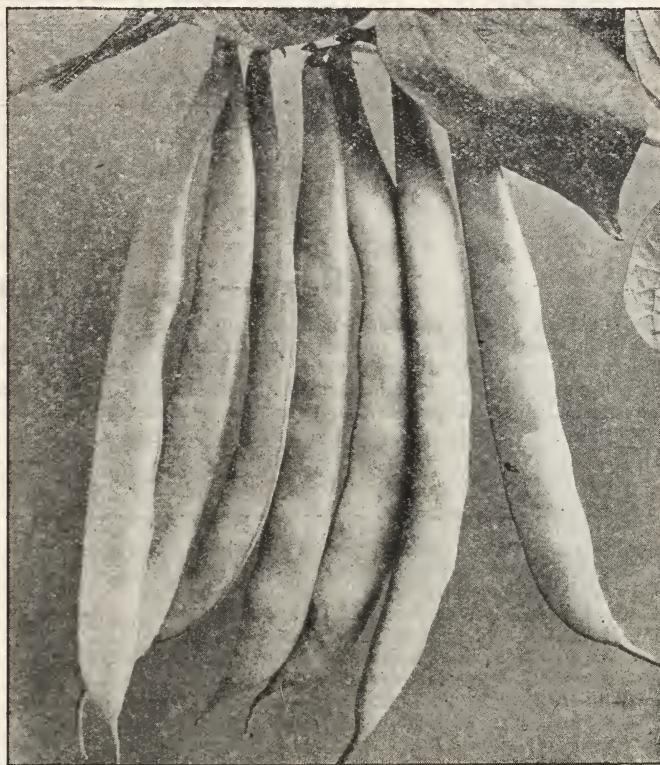
Two pounds are sufficient for 100 feet of drill; 90 pounds for one acre in drills.

Beans ordered by mail are subject to an extra charge of eight cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

English Beans

Broad Windsor. Plant as early in the spring as the ground can be worked, from two to four inches apart, in drills from twenty-four to thirty inches apart. As soon as the plants are in full blossom, and the lower pods begin to set, pinch off the tops; this will insure the filling of the pods and hasten the maturity of the seed.

1 lb., .35; 2 lbs., .65



GREEN PODDED BUSH BEANS

ABBREVIATIONS

Ex. Ey.	Extra early.	F.	Flat.	G.	Green.	No S.	No String.
Ey.	Early.	T. F.	Thick-flat.	Y.	Yellow.	V. L. S.	Very little string.
M. Ey.	Medium early.	S. R.	Semi-round.	M. G.	Mottled green.	S.	String.
M.	Medium.	R.	Round.	M. Y.	Mottled Yellow.	S. S.	Strong string.
M. L.	Medium late.	S. B.	Saddle-back.				
L.	Late.						

Most flats become thick-flat and most thick-flats become semi-round as they near maturity.

Variety.	Description.				Price.
Burpee's Bush Lima. For shell bean only.....	L.	F.	G.	S.	1 lb. .40 2 lbs. .75 8 lbs.
Burpee's Stringless Green Pod. Extra fine quality.....	Ex. Ey.	R.	G.	No S.	.35 .60 \$2.00
Bountiful. Hardy, one of the best.....	Ey.	T. F.	G.	V. L. S.	.35 .60 2.00
Dwarf Horticultural. Good quality, stringless.....	Ey.	T. F.	M. G.	No S.	.35 .60 2.00
Low's Champion. One of the best, either string or shell.....	Ey.	T. F.	G.	No S.	.35 .60 2.00
Long Yellow Six Weeks.	Ey.	T. F.	G.	V. L. S.	.35 .60 2.00
Improved Refugee. Fine quality, prolific, fine for canning.....	M. L.	R.	G.	No S.	.35 .60 2.00
Brittle Wax. Fine, rather delicate.....	Ey.	R.	Y.	No S.	.35 .60 2.00
Black Wax. Superior quality, prolific.....	Ey.	R.	Y.	No S.	.35 .60 2.00
Currie's Rust-proof Wax. Tender and good quality.....	Ey.	F.	Y.	No S.	.35 .60 2.00
Golden Wax, Improved.	Ey.	T. F.	Y.	No S.	.35 .60 2.00
Golden Wax, Keeney's Rustless. Superior quality, almost rustless.....	Ey.	T. F.	Y.	No S.	.35 .60 2.00
Sure Crop Stringless Wax. Extra quality, stands wet weather well.....	Ey.	T. F.	Y.	No S.	.35 .60 2.00
Royal Purple Wax. Fine for home garden.....	Ey.	R.	Y.	No S.	.35 .60 2.00

BEANS—Continued

Field Varieties

Variety.	Description.				Price.
	M. L.	F.	G.	S. S.	1 lb. 2 lbs. 8 lbs.
Kidney, Red. Excellent as shell beans, or for baking.....	M. L.	F.	G.	S. S.	.25 .45
Pea. Early and productive; for baking.....	Ey.	R.	G.	S. S.	.25 .45
Yellow Eye. (State of Maine.) An improved strain.....	Ey.	F.	G.	S. S.	.25 .45

Beans---Pole or Running

The planting of the various sorts of pole beans should be delayed a week or more after the first planting of the early dwarf sorts. They succeed best in sandy loam, which should be liberally enriched with short manure in the hills, which

are formed, according to the variety, from three to four feet apart; from five to six seeds are planted in each hill, about two inches deep.

Two pounds will plant 150 hills; 20 to 24 pounds to the acre.

Variety.	Description.				Price.
	Ey.	F.	Y.	S.	1 lb. 2 lbs. 8 lbs.
Golden Cluster Wax. Good either as a shell or snap bean.....	Ey.	F.	Y.	S.	.35 .60 \$2.25
Ideal Market. The earliest variety (See Page 19).....	Ey.	T. F.	G.	No S.	.50 .90
Kentucky Wonder. Very large pods of fine quality.....	Ey.	R.	G.	V. L. S.	.35 .60
Kentucky Wonder Wax. Similar to above with yellow pods.....	Ey.	R.	Y.	V. L. S.	.40 .75
King Horticultural. Good snap or shell bean.....	Ey.	T. F.	G.	V. L. S.	.35 .60
Lazy Wife's. Very productive and of fine flavor.....	M. L.	F.	G.	No S.	.35 .60
Lima, Large. A fine shell variety.....	L.	F.	G.	S.	.40 .75
Lima, Small. Earlier and harder than Large Lima.....	L.	F.	G.	V. L. S.	.40 .75
London Horticultural. Productive; either snap or shell bean.....	M. L.	T. F.	G.	V. L. S.	.35 .60
Red Cranberry. Great favorite; pods large and tender.....	Ey.	R.	G.	V. L. S.	.40 .75

ALL BEANS—INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA

BEET

The best results are obtained on a deep, rich, sandy loam. For early use sow as soon as the ground will admit, in drills fourteen inches apart, and thin to four inches; for the main crop, sow the first week in May, and for winter

use as late as June. The soil should be deeply manured and well cultivated. In lifting and storing the roots, care must be taken that they are not bruised.

One ounce to 50 feet of drill; 6 pounds to the acre.

	Pkt.	Oz.	1/4 lb.	Lb.
Crosby's Egyptian. As early as the Egyptian, shape more round, flesh sweet and tender.....	.10	.20	.60	\$1.50
DETROIT DARK RED. Similar in shape to the Dewing's, of dark red color, with small tops. A favorite with market gardeners .....	.10	.20	.60	1.50
Dewing's Blood Turnip. Of fine form and flavor, blood red. A desirable variety. ....	.10	.20	.50	1.25
Dirigo Extra Early. A rich, blood-red beet of fine grain and flavor, earlier than the Egyptian or the Eclipse.....	.10	.20	.50	1.25
Early Wonder. A popular variety among market gardeners. It matures very rapidly and is so uniform in growth that the crop can be lifted practically at one time.....	.10	.20	.60	2.00
Eclipse. This variety is about as early as the Egyptian, but larger and of finer quality; color, dark crimson .....	.10	.20	.50	1.25
Edmand's Early Turnip. A variety of handsome round shape. The skin is deep blood red in color, the flesh very dark and exceedingly sweet and tender in quality .....	.10	.20	.50	1.25
Swiss Chard (Lucullus). The leaves of Swiss chard are used as greens, cooked in the same manner as spinach, and the large ribs are prepared like asparagus, in which manner they are delicious. The "Lucullus" is the largest and the best variety of Swiss chard .....	.10	.20	.50	1.25

BEET—Continued

Mangel-Wurzel and Sugar Beets

These beets, which have for a long time been grown abroad by stock raisers and dairymen, can be used to advantage in place of some of the more expensive mill feeds, and should be planted more extensively than they are. For poultry they furnish a valuable winter feed, much relished by the hens. From ten to fifteen tons can be raised on one acre.

Sow in May or June—5 pounds per acre.

Allen's Mammoth Long Red Mangel-Wurzel. A variety producing roots of mammoth size.....

Pkt.	$\frac{1}{4}$ lb.	Lb.
.10	.30	.75

Golden Tankard Mangel-Wurzel. Bright yellow; very productive

.10	.30	.75
-----	-----	-----

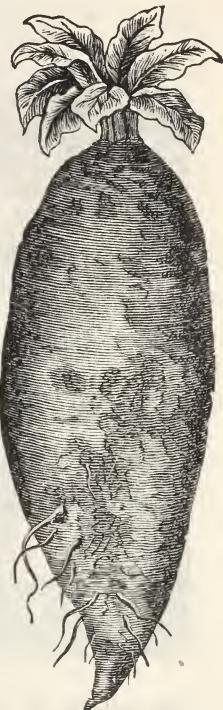
Sutton's Prize Winner Mangel-Wurzel. Considered to be the very best of the yellow Mangels. The massive roots are of a deep globe shape, very clean in outline, with a single taproot, and carry a comparatively small amount of foliage. This variety may be relied upon to yield a profitable return on practically every class of soil that is capable of growing Mangels, and when stored in good condition the roots keep sound until the following summer. (See page 19).....

Allen's Mammoth Long Red Mangel-Wurzel

.10	.50	\$1.50
-----	-----	--------

Lane's Imperial Sugar. A greatly improved variety of the White French Sugar

.10	.30	1.00
-----	-----	------

**Broccoli**

Broccoli is nearly allied to the cauliflower, and may be regarded as a variety of that delicious vegetable. It is hardy and sure to head, but inferior in flavor.

It succeeds best in deep, rich, moist soil and in cool weather. Seeds should be sown at the same time and plants receive the same general culture as cabbage.

One ounce of seed will produce about 2,000 plants.

Pkt. Oz.

Purple Cape. Heads greenish purple; medium size and compact

.10	.60
-----	-----

Italian (Early Green Calabrese). A variety much liked by the Italian trade. Forms a fair-sized head; after this is cut, new sprouts grow which form small, loose heads....

.15	\$1.10
-----	--------

Brussels Sprouts

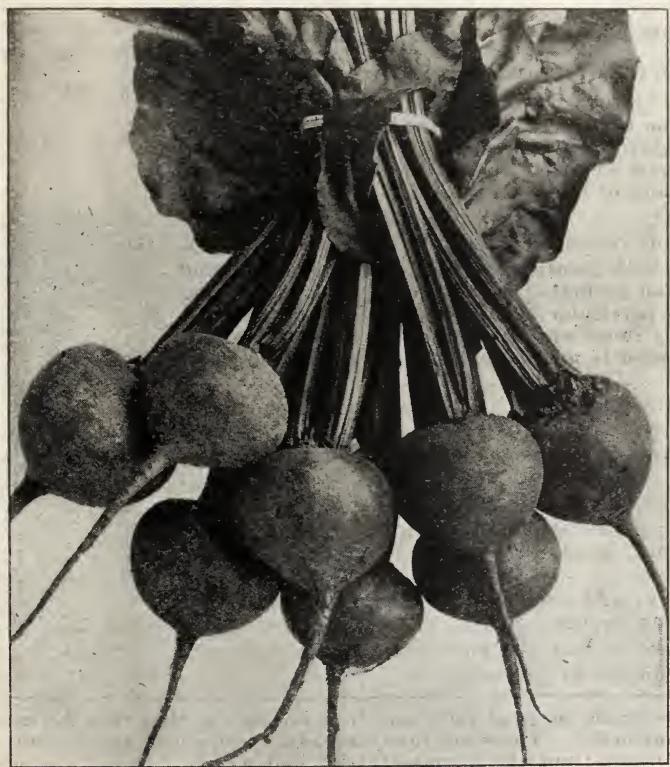
A species of the cabbage family, producing along the stem small sprouts like little cabbages. Grown in the same manner as winter cabbage.

One ounce of seed will produce about 2,500 plants.

Pkt. Oz. $\frac{1}{4}$ lb.

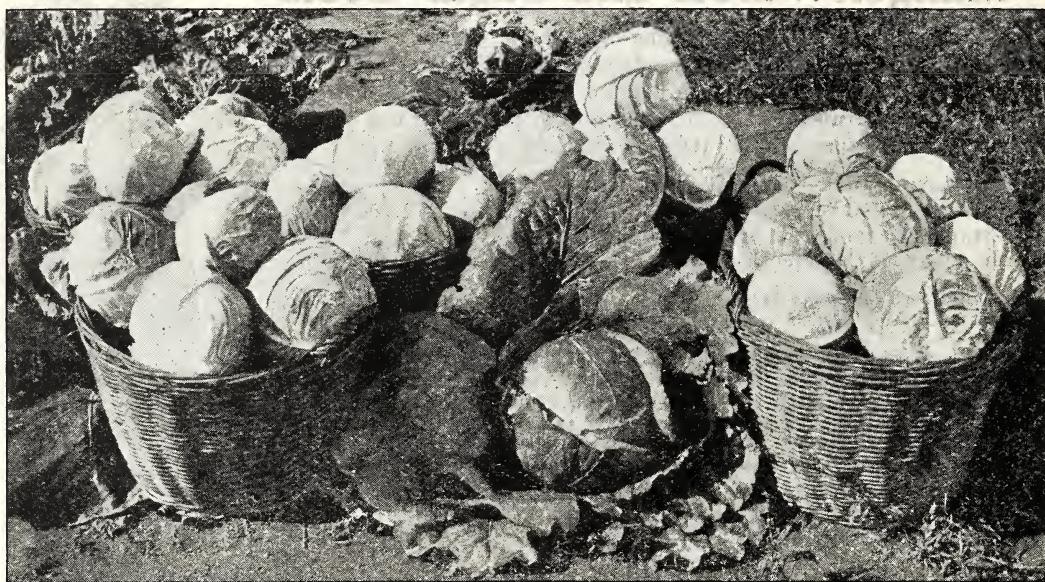
Improved Long Island. A variety of excellent quality....

.10	.50	\$1.50
-----	-----	--------



DETROIT DARK RED BEET

Cabbage



The cabbage is one of the most important vegetables, and some of its varieties are universally cultivated. The ground must be highly manured, deeply dug or plowed, and thoroughly worked, to insure good, full-sized heads. A heavy, moist and fresh loam is the most suitable. The early sorts should be sown very early in the spring in hotbeds, or later in the open ground. Eighteen inches by three feet apart is the common distance.

One ounce will produce about 3,000 plants; 4 to 5 ounces to the acre.

	Pkt.	Oz.	1/4 lb.
All Seasons. Larger than Henderson's Early Summer, nearly as early; very solid and sure heading .....	.10	.35	\$1.25
COPENHAGEN MARKET. One of the best large, round head, early cabbages in cultivation, the type being thoroughly fixed and nearly all the heads maturing at the same time. The plant is short-stemmed; heads, set near the ground, are very solid, with a small core, and of fine quality. One of the very best early cabbages for market gardeners .....	.10	.40	1.50
Danish Ball Head. (Imported.) Heads round and solid. A good winter variety.	.10	.40	1.50
DANISH BALL HEAD. (Cape Elizabeth grown.) A valuable, round, solid winter variety. Is a long keeper, and profitable for shipping, keeping long after other sorts have gone. This particular strain is the result of years of selection, and is in great demand by those who appreciate the best. The slight increase in price over the regular seed is more than offset by the increased yield .....	.10	.60	2.25
Early Jersey Wakefield. A standard early variety for home use or market. Heads somewhat pointed .....	.10	.35	1.25
Extra Early Copenhagen Market. An improvement on the Copenhagen Market, being equally good and earlier .....	.10	.60	2.00
Golden Acre. The earliest round-headed variety. (See specialties, page 18) ....	.15	.60	2.00
Henderson's Early Summer. One of the earliest of large cabbages, coming in but a few days later than the Wakefield; heads of large size, very solid and compact .....	.10	.35	1.25
Improved American Savoy. Very sweet and tender; good-sized, firm heads; very reliable and much esteemed for family use.....	.10	.35	1.25
Mammoth Red Rock. Used almost exclusively for pickling .....	.10	.35	1.25
Pe-Tsai (Chinese Cabbage). Grows similar to Cos lettuce .....	.10	.35	1.25

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Carrot

Carrots require a very finely pulverized soil to grow them to perfection. A good, light and well-enriched sandy loam is the best for this crop. For field culture, sow in drills, two to two and one-half feet apart, and for table use sow the smaller varieties in rows sixteen to eighteen inches apart. For early crops, cover one-half an inch deep and thin to three inches apart in the rows; for late, cover three-fourths of an inch deep and thin to four inches.

One ounce to 100 feet of drill; 3 to 4 pounds to the acre.

Chantenay. A choice variety, longer than the Scarlet Horn, and a little broader at the top. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

Danver's Carrot. Bagley Strain. This is a cylindrical shaped carrot, eight to ten inches in length, which grows wholly in the ground and is very attractive. Probably the heaviest yielding strain on the market. Price: Pkt., 10c.; Oz., 25c.; $\frac{1}{4}$ lb., 75c.; 1 lb., \$2.50.

Danver's Half Long. In form it is midway between the Long Orange and Scarlet Horn. The root is of a rich, dark orange color and grows very smooth. Very productive and keeps well. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

EARLY MARKET. A thick, stump-rooted early variety of brilliant color, broad at the top, gradually getting smaller towards the root, which is blunt. An excellent market sort. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

Hutchinson. An improved strain similar to the Danver's, but of larger size. It is of excellent quality and in great favor with market gardeners, who find it a ready seller on account of its attractive appearance. Price: Pkt., 10c.; Oz., 25c.; $\frac{1}{4}$ lb., 75c.; 1 lb., \$2.50.

Improved Long Orange. The best late variety. Roots of large size, heavy cropper; an excellent keeper. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

Large White Belgian. Large, long-rooted variety; valuable for feeding stock. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

Nantes. Early, roots almost cylindrical, very smooth, and grows about six inches long; the flesh is entirely red, very sweet, and almost entirely without a core. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.



DANVER'S HALF LONG CARROT



Henderson's Early Snowball Cauliflower

Oxheart. Very thick and short, fine grained and sweet. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

Cauliflower

Any soil that will grow cabbages will grow cauliflower, as their requirements are almost similar, but as the product is more valuable, extra manuring and preparation of the soil will be well repaid. The seeds may be sown in the hotbed in March or April, and transplanted to open ground about the first of May.

One ounce will produce about 2,500 plants.

Cauliflower Plants ready about May 15.

Henderson's Early Snowball. One of the best early sorts. Very reliable and grown largely for the market. Price: Pkt., 15c.; Oz., \$2.50.



GOLDEN SELF-BLANCHING CELERY

Paris Golden. Plants are stocky and full hearted, vigorous in growth and easily blanched

Soup Celery. (Not for sowing.) Used for flavoring pickles, soup, etc.

Celery

To have celery early it should be sown in a hotbed, quite early in the spring, and when three inches high plant out in a well-prepared bed, which must be covered in frosty weather. For the principal crop sow early in the spring, very shallow in the seed bed, and when the plants are about six inches high, transplant them six inches apart into trenches for blanching. Dig the trenches four feet apart, a foot wide and ten inches deep. Fill in five or six inches of well-rotted manure, and mix thoroughly half a spade deep with the earth at the bottom. The tops of the plants should be shortened before they are set. Earth up to blanch three or four times during their growth, taking care that no earth falls in the center of the plant.

One ounce of seed produces about 4,000 plants.

Pkt. Oz. $\frac{1}{4}$ lb.

Boston Market. A favorite variety, remarkable for its tender, crisp and succulent stems, and its peculiarly mild flavor; keeps well10 .50 \$1.50

GOLDEN SELF-BLANCHING. A fine solid variety of a beautiful waxy, golden color; very thick stalks of excellent flavor; growth close, compact and of medium height..... .10 .50 1.50

Henderson's White Plume. Crisp, solid, and possessing a sweet, nutty flavor; requires very little labor in blanching. Very early and handsome..... .10 .50 1.50

Golden Plume, or Wonderful. A large early variety of fine appearance and quality, easy to blanch, and a good keeper15 1.00 3.00

Paris Golden. Plants are stocky and full hearted, vigorous in growth and easily blanched

Soup Celery. (Not for sowing.) Used for flavoring pickles, soup, etc.05 .10 .30

Swiss Chard

Swiss chard is sometimes called Sea Kale beet. After once having used Swiss chard for greens we believe your garden will always have at least a row of it, for it is delicious. The leaves are used as greens, and served like spinach. The mid-ribs may be cooked like asparagus. Cuttings may be made all summer, as it can be cut down to the ground and new shoots will soon spring up and make fast growth.

Lucullus. Largest and best variety..... .10 .20 .50 \$1.25

Chervil

Curled Chervil. An aromatic sweet herb. The young leaves are used in soups and salads. Sow thinly in May, in drills half an inch deep, one foot apart..... .10 .25 .85

Chicory

One ounce to 100 feet of drill.

Large Rooted. Used to mix with or as a substitute for coffee. The roots are taken up, washed, cut in small pieces and carefully dried before being used. Cultivation same as the carrot..... .10 .35 \$1.25

Sweet Corn

The sweet or sugar varieties, being liable to rot in the cold, wet ground, should not be planted before the middle of May, and for a succession continue planting every two weeks until July, in rich, well-manured ground, in hills three feet apart each way, covering about an inch, and thin out to three plants to a hill, or plant in rows four feet apart, and to stand eight inches apart in the rows.

One pound to 125 hills; 20 pounds to the acre.

Corn ordered by mail is subject to an extra charge of eight cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

CORN—Continued

Early Varieties

GOLDEN SUNSHINE. Of a rich, golden yellow with ears about one inch longer than the Golden Bantam and with 12 rows. Very early, being about 7 days earlier than the Golden Bantam

Pkt. $\frac{1}{2}$ lb. 1 lb. $12\frac{1}{2}$ lbs.

.10 .30 .50 \$4.50

WHIPPLE'S EARLY YELLOW.

A remarkable new yellow sweet corn of much merit. While the stalks grow 6 feet or more in height and the 14-rowed ears are 7 to 8 inches in length, this variety matures three days earlier than Golden Bantam. The kernels are broad, deep and excellent quality

.10 .30 .50 4.50

Early Crosby. An excellent early variety. The ears are five to six inches long and the grains are white, sweet and tender.....

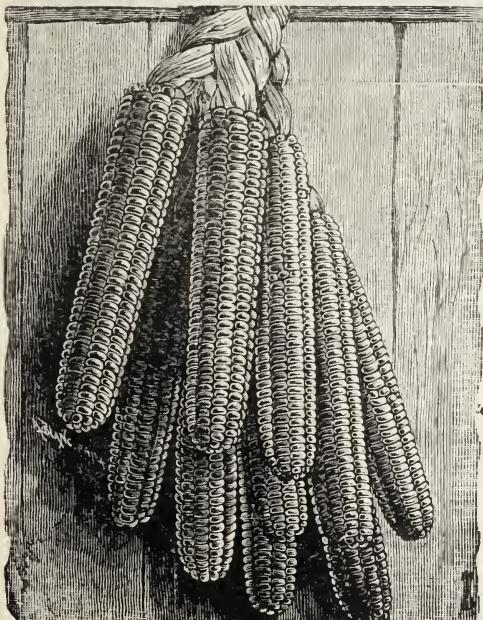
.10 .30 .50 4.50

Golden Bantam. An early variety. The ears are medium size, but thickly set with delicious yellow kernels. The quality of this variety is superb, and it has become a general favorite sweet corn with all who have tried it. Golden Bantam has a flavor distinct from other sorts, and if you have never tried it in your garden you should plant it this year. Never mind if the color is yellow, the rich nut quality is there

.10 .30 .50 4.50



GOLDEN BANTAM SWEET CORN



EARLY YELLOW FIELD CORN

Pkt. $\frac{1}{2}$ lb. 1 lb. $12\frac{1}{2}$ lbs.

Early Surprise. The earliest white sweet corn under cultivation. The stalk is about 4 ft. tall and the ears run 8, 10 and 12 rowed and very large for such an early maturing sweet corn

.10 .30 .50 4.50

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

CORN—Continued

2000—2100

Field and Ensilage Corn

(56 pounds to the bushel)

	1 lb.	2 lbs.	14 lbs.
Early Yellow Canada. The variety most widely grown in northern New England. An early eight-rowed flint corn, with handsome ears and comparatively small cobs, filled to the tips with large, broad kernels.....			
Early Sanford (Ensilage). Very early; ears white; excellent for fodder and ensilage.		Pk.	Bu.
Early Eureka (Ensilage). One of the tallest and best varieties of ensilage corn, producing a large amount of fodder to the acre.			
Improved Leaming (Ensilage). An early, very productive variety. One of the best for ensilage; profitable as a green fodder.....			
Red Cob (Ensilage). A pure white corn. Is tender and juicy, has short joints, and grows to a great height, with an abundance of leaves.....			
Sweepstakes (Ensilage). We recommend this as the best ensilage corn we know of, because of its earliness and the great amount of ensilage which it produces, as high as twenty to twenty-five tons to the acre. When many varieties of ensilage corn are just beginning to form ears, Sweepstakes corn shows good-sized ears. As all of our Sweepstakes corn has been run through a three-eighths inch screen, you get only large, plump kernels which test ninety per cent germination or better, and as twelve quarts of corn will plant an acre sufficiently thick to give the best results, the price of seeding an acre is not greatly more than if you used a cheaper corn, and the yield will be much larger. (See page 18)			

Cress—Peppergrass

A well-known salad. Requires to be sown thickly and covered very slightly. Sow at frequent intervals to keep up a succession, as it soon runs to seed.

One ounce will sow about 100 feet of drill.

	Pkt.	Oz.
Extra Curled. Very fine; may be cut two or three times .....	.10	.20
Water Cress. A hardy perennial aquatic plant, growing in water along the margins of streams. ....	.10	.60

Cucumber

The cucumber is a tender annual, and therefore should not be planted or set out in the open air until there is a prospect of continued warm and pleasant weather. Cucumbers succeed best in warm, moist, rich, loamy ground. The hills should be four or five feet apart in each direction. When all danger from insects is past, leave but three or four of the strongest plants in the hill.

One ounce to 50 hills; 2 pounds to the acre.

	Pkt.	Oz.	1/4 lb.	Lb.
Boston Pickling. The finest variety to grow for pickles; yields large crops; short, straight and dark green.....	.10	.15	.50	\$1.50
Cumberland. A variety of the Improved White Spine type. Is a splendid table sort and excellent for pickling. Color, deep green with white tip; flesh firm; very crisp and tender.....	.10	.15	.50	1.50
DAVIS PERFECT. The cucumbers grow long and slim, sometimes measuring twelve inches in length. The color is a rich, dark, glossy green, which they hold until nearly ripe. Very tender and of fine flavor.....	.10	.20	.65	2.25

CUCUMBER—Continued

Early Frame. An early standard variety, about five inches long.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.15	.50	\$1.50

Early Fortune. A prime favorite with market growers because of its extra earliness and the fine deep green color which it holds long after picking. The shape is uniform and the quality all that could be desired.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.20	.60	\$2.00

Early Green Cluster. Grows in clusters; early and productive.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.15	.50	\$1.50

Early Russian. The earliest variety.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.15	.50	\$1.50

Improved White Spine. Superior for table use; very productive; medium size, straight and well formed.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.15	.50	\$1.50

Japanese Climbing. Quick, strong-growing vines, which may be trained upon a trellis or poles. Fruit from twelve to sixteen inches in length, skin dark green, flesh pure white, crisp and of fine flavor. Prices: Pkt., 10c.; Oz., 20c.; 1/4 lb., 50c.; Lb., \$1.50.

Lemon. A distinct type; nearly round, with the yellow and green markings and smooth skin of the lemon, while flesh is exceedingly tender, crisp and sweet. Prices: Pkt., 10c.; Oz., 15c.; 1/4 lb., 50c.; Lb., \$1.50.



IMPROVED WHITE SPINE CUCUMBER

Long Green. Long and crisp; a popular and reliable variety for pickling and table. Prices:

Pkt., 10c.; Oz., 20c.; 1/4 lb., 60c.; Lb., \$2.00.

West India Gherkin. Small, prickly variety; grown exclusively for pickling. Prices: Pkt., 10c.; Oz., 20c.; 1/4 lb., 60c.; Lb., \$2.00.

White Wonder. A new variety. Very handsome, with ivory white fruit. Prices: Pkt., 10c.; Oz., 20c.; 1/4 lb., 60c.; Lb., \$2.00.

Dandelion

A hardy perennial plant, with broad thick leaves affording one of the earliest as well as one of the most healthful of spring greens. Sow as early as the weather will permit, in good, well-enriched soil, in rows twelve inches apart, covering seed one-fourth of an inch deep, the earth firmly pressed over the seed.

One ounce to 150 feet of drill; 1 pound will sow an acre.

Pkt.	Oz.	1/4 lb.
------	-----	---------

Arlington Thick-Leaved. The thickness of the leaf and dark green color make it especially desirable. 15 \$1.50

Improved French Thick-Leaved. One of the best varieties..... 10 .80 \$3.00

Egg Plant

The egg plant will thrive well in any good garden soil. Sow in the hotbed and when two or three inches high prick out into pots, or rows two and one-half to three inches apart. When the weather will permit, transplant into good, rich soil, thirty inches apart each way.

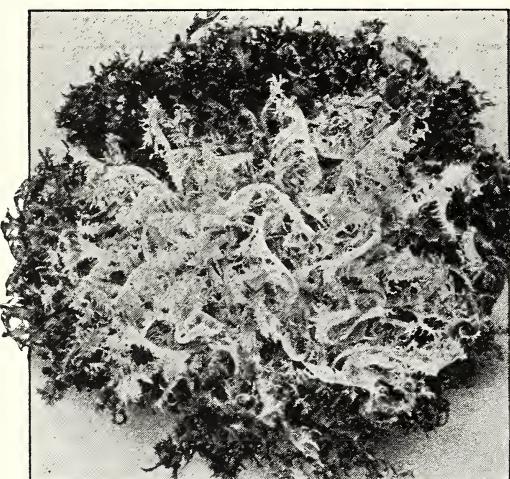
One ounce will produce 1,000 plants.

Pkt.	Oz.
------	-----

New York Improved Large Purple. Most popular variety. The fruit is large, nearly round, dark purple and of excellent quality..... 10 .65



DANDELION



ENDIVE

Endive

For early use, sow in May, scattering the seed thinly in drills ten inches apart, covering it lightly, and for a succession, every two or three weeks until midsummer. The plants must be blanched before using, which is accomplished by gathering the large outer leaves to a point at the top and tying them together.

One ounce will sow 150 feet of drill.

Pkt. Oz. $\frac{1}{4}$ lb.

Broad-Leaved Batavian. (Esca-
rolle.) Variety having wide,
thick leaves, straight at the
edges and curved toward the
center. Color, dull green.....

.10 .25 .90

Green Curled. Has very curly
leaves, the outer edges being
much indented and crested. An
attractive plant and one of the
best varieties.

.10 .25 .90

Kale (Borecole)

Sow early in May in a prepared bed, covering the seed lightly. Transplant in June, in rows three feet apart and two feet apart in row, and treat in the same manner as for cabbage. Kale is improved by a little frost, giving it a more delicate flavor.

One ounce to 150 feet of drill.

Green Curled Scotch. A round, dwarf variety, rarely exceeding eighteen inches in height, but spreading out under good cultivation to three feet in diameter. Price: Pkt., 10c.; Oz., 25c.; $\frac{1}{4}$ lb., 85c.

Kohl-Rabi (Turnip-rooted Cabbage)

A vegetable intermediate between the cabbage and turnip. The edible part, the bulb, grows on a stalk a few inches above the ground. It is best cultivated by sowing the seeds in rows in May, June and July, according to latitude. Rows

should be sixteen to eighteen inches apart and plants six inches apart in row.

One ounce will sow about 200 feet of drill.
Early Purple. Differing from the white only in color, being of a bluish purple. Price: Pkt., 10c.; Oz., 25c.; $\frac{1}{4}$ lb., 75c.

Leek

The leek is very hardy and easily cultivated. It succeeds best in a light, well-enriched soil. Sow as early in the spring as practicable, in drills one inch deep and one foot apart. When six or eight inches high they may be transplanted in rows ten inches apart each way, as deep as

possible, that the neck, being covered, may be blanched.

One ounce of seed to 150 feet of drill.

London Broad Flag. A large variety with broad leaves. Price: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., 85c.

Lettuce

Lettuce thrives best in rich, moist ground. Sow the seeds in hotbeds in February or March, and transplant into a sheltered border with a southern exposure. For successive crops, sowing may be made in the open ground as early as

spring opens and continue until July. Transplant or thin plants to stand eight to twelve inches apart.

One ounce to 125 feet of drill.

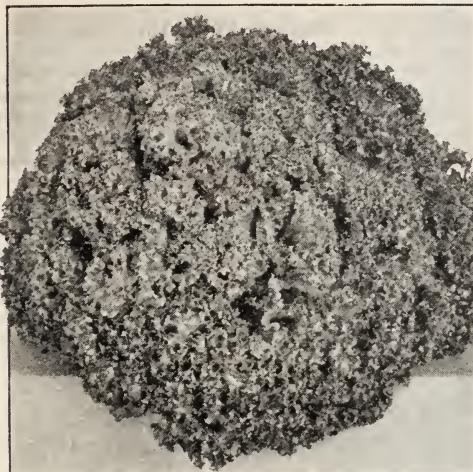
The Loose Leaf Varieties

Grand Rapids. This sort is the best and most popular loose-leaved lettuce, being of quick growth. Fine for greenhouse forcing and hardy. Price: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

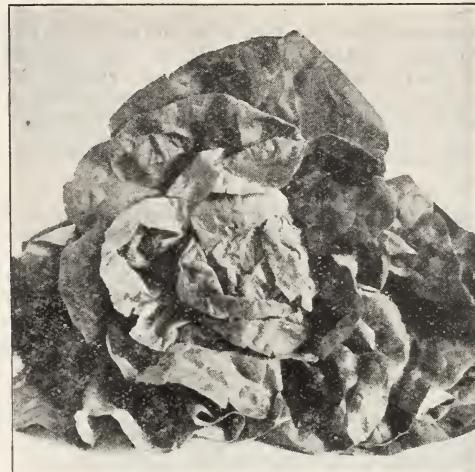
Boston Curled. A variety of great beauty and of very superior quality. Leaves beautifully curled, attractive on table. Price: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

LETTUCE—Continued



BOSTON CURLED LETTUCE



TENNISBALL LETTUCE

The Heading Varieties

Big Boston. Fine for forcing in cold frames and for planting in open ground. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Crisp as Ice. Medium-sized heads, very crisp and of fine flavor. Outside leaves tinged with bronze, inside creamy yellow. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Hanson. Heads very large, solid, tender, crisp and of fine flavor; color, beautiful green outside and white within. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Iceberg. A large-heading variety; crisp and brittle, and color light green, lightly tinged with brown on top of the head; leaves curled on the edges. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

May King. Very early, medium size and tender; heads light green, with center leaves tinged with brown and the hearts clear yellow. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Mignonette. Small, compact, creamy-yellow heads, tinged outside with russet; of superior quality, sweet, crisp and tender, very early

and hardy; excellent "all seasons" variety. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

New York or Wonderful. This is one of the best summer lettuces. It resists the hot weather, is very slow to run to seed, and is a sure header under the most trying conditions. The outer leaves are of a green color, the inner ones blanch to creamy-white; crisp, tender, delicious and sweet. The heads often measure fifteen inches. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Prize Head. One of the very best varieties, making a loosely formed head. Color bright green tinged with brownish red; very curly and of remarkably fine flavor. Grows quickly and all except the outer row of leaves are very brittle. It is probably the most easily grown lettuce in cultivation. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Tennisball, Black-Seeded. Popular for open-air culture; heads compact, crisp and tender. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Romaine Lettuce

White Paris Cos (Romaine). A sort with long, narrow, upright leaves; does not head, but

when tied up blanches very easily. Prices: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Martynia

A strong-growing, hardy annual, with curious-shaped seed-pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance and should be gathered when about half grown. Plant in May

or June in rows two feet apart, making hills about a foot apart.

One ounce will plant 50 hills.

Martynia Proboscidea. Best for pickling. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

Musk Melon

Melons thrive best in a moderately enriched, light soil. The hills should be six feet apart each way. After all danger of frost is past, plant twelve or fifteen seeds in each hill, and when well up thin out to three or four plants.

One ounce to 60 hills; 2 to 3 pounds for an acre.

Bender's Surprise. Very popular variety in the East. A very delicious, large, salmon fleshed melon with superior shipping and keeping qualities. Medium early. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c

Emerald Gem. Medium size; flesh rich salmon, of delicious flavor and superior quality; early

and prolific. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.

HONEY DEW. The delicious, honey-like flavor of this new melon met with instantaneous public favor and created a sensation wherever used. The fruit is good size, weighing eight to ten pounds; light-colored, smooth skin; thick, light green flesh. Prices: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 75c.

Large Round Yellow Cantaloupe. Flesh reddish-orange, sweet and of good flavor; an early and productive variety. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.

Rocky Ford. Flesh green; medium size; oval shaped. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.

Water Melon

Plant in hills eight feet apart and cultivate same as musk melon.

One ounce for 30 hills; 4 to 5 pounds to the acre.

Citron. The standard variety for preserves. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 35c.

Cole's Early. An extra good variety for growing in the Northern States, as it matures early. Large heart, flesh of fine texture and good fla-

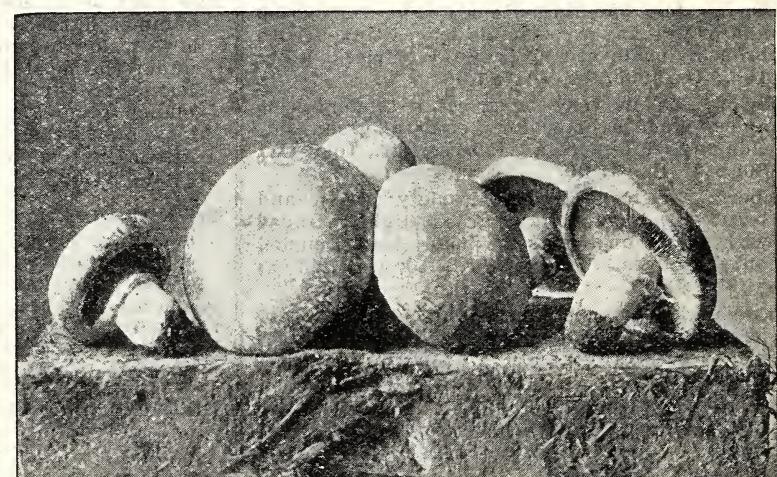
vor, rind thin. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.

Mountain Sweet. An old and reliable sort; flesh red. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 35c.

Peerless or Ice Cream. Very early, of medium size and one of the best for growing in the North. A short oblong in form; rind thin, light green, mottled and finely veined with a darker shade; flesh bright scarlet and very sweet; seeds white. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 35c.

Mushroom Spawn

Mushrooms may be grown in a warm cellar or shed in winter, or in the open air in summer. Take partially dry, fresh horse manure and lay it in a heap to ferment; turn and mix it well every few days, and when well fermented it may be made into a bed, mixing it well together and beating or treading it firmly. Use a thermometer to thrust into the bed, and note the temperature. When the heat has partially subsided, leaving a temperature of 70° to 80°, put in the spawn, which may be inserted in pieces the size of a walnut, about two inches deep and six inches apart. After about two weeks, cover with fresh soil about two inches deep and beat it down evenly and firmly. Finish off with a covering of clean straw or hay about a foot thick. If the temperature is right, mushrooms will begin to come up in about six to eight weeks, and the bed will continue bearing



for about a month. One pound of spawn is sufficient for a bed 2 x 6 feet.

English Spawn. In bricks, per lb., 25c.; 6 lbs., \$1.25.

By mail, add 8 cts. per lb. for postage, and for larger shipments by mail, see rates on page 2 of cover.

Mustard

A pungent salad used with cress. The seed is used for flavoring pickles, etc. Sow in May thickly in rows and cut when two or three inches high.

Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 40c.; 1 lb., \$1.25.

White London. Mild flavor. Best for salads. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 40c.; 1 lb., \$1.25.

One ounce to 40 feet of drill.

Brown. More pungent in flavor than the white.

Okra (Gumbo)

Sow about the middle of May, when the ground is warm, in hills about three feet apart; cover seed one-half inch and thin plants to three in a hill. Keep ground well hoed and earth up around plants to support them. Gather pods while young and tender. Excellent for

soups, stews, etc., to which they impart a rich flavor.

One ounce will sow 40 feet of drill.

Improved Dwarf Green. An early dwarf and prolific variety, with thick green pods. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 30c.

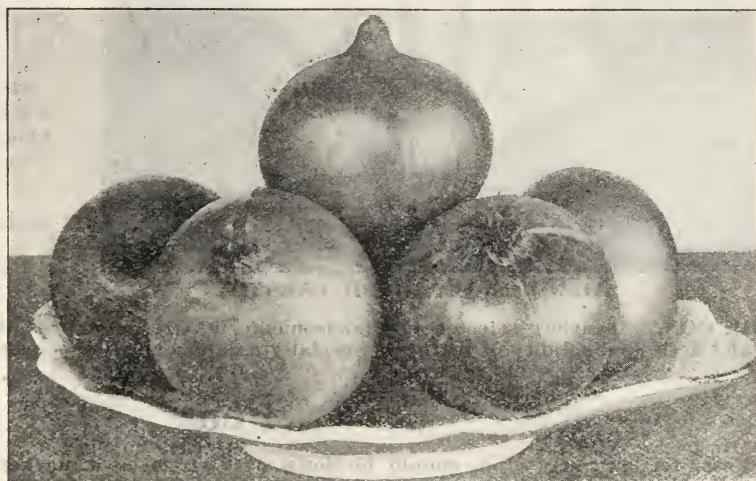
Onion

A good crop is impossible unless the soil is very rich and kept clean. Use well-rotted manure freely, and get the crop in as soon as possible in the spring, no matter if the weather is cold and unpleasant. Sow in drills one foot apart and cover about one-third of an inch, treading or rolling after sowing, so that the hot, dry atmosphere may not dry up and destroy the sprouting seed. As soon as the plants can be seen in the rows give a shallow working, followed in a few days by another working as close to the plants as possible, and after this a thorough hand weeding. Cultivate, if possible, once a week, and remove by hand any weeds that appear. As soon as the tops die and fall the bulbs may be pulled and placed in small windrows, turning often. Cut off the tops half an inch from the bulbs and store in crates under cover in a uniform temperature a little above freezing.

One ounce to 100 feet of drill; 5 pounds to the acre.

Extra Early Red Globe. Ten days earlier than the Wethersfield, of medium size and deep, rich color; an abundant producer and of good form and flavor, keeping well. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

YELLOW GLOBE DANVERS. Extra choice seed, grown from bulbs especially and carefully selected as to shape; the most popular of all



YELLOW GLOBE DANVERS ONION

the yellow onions for market and home use. A heavy cropper, good keeper, and of fine, mild flavor. A profitable variety for market gardeners. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

Large Red Wethersfield. Large size, productive and a good keeper. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

New Queen. A silver-skinned variety, of quick growth and remarkable keeping qualities. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

Prizetaker. Large, pale yellow skin; flesh white; mild flavor. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

White Portugal. A mild and desirable summer variety, flat in shape, extensively grown for pickling. Prices: Pkt., 10c.; Oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

Onion Sets

Japanese Onion Sets. This onion gives a greater yield than any onion set on the market, besides being a good keeper and of fine flavor. Prices: 1 lb., 35c.; 8 lbs., \$2.00.

White Onion Sets. Ready in April. Prices: 1 lb., 35c.; 8 lbs., \$2.00.

For larger quantities, prices will be given on application.

Parsley

Late in autumn place glass frames over some of the plants to lengthen out the season of cutting. For garnishing purposes nothing equals parsley; it is also used in salads, soups, etc. Any good soil is suitable for growing this plant.

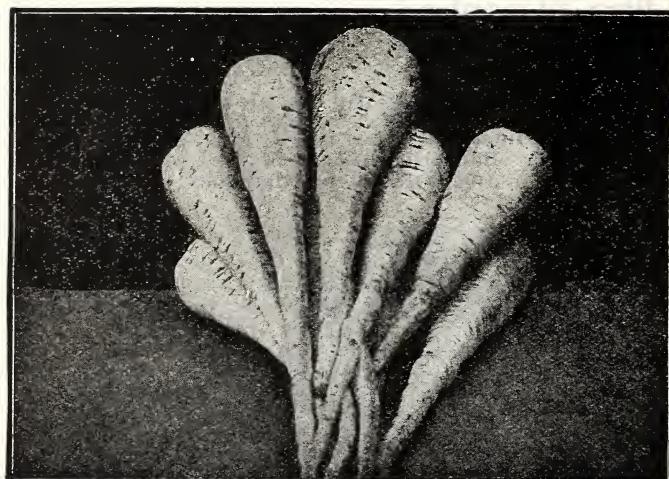
One ounce to 150 feet of drill.

Extra Double Curled. Prices: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 45c.

Onion sets should be planted near the surface as early in the spring as the ground will permit, in drills about twelve inches apart and four inches in the rows. They produce a very early and profitable crop, and grow in any good soil.

Add 8 cents per pound if sent by mail, and for larger shipments by mail, see rates on page 2 of cover.

Parsley seed germinates very slowly, taking two to four weeks to come up; hence, if wanted early, no time should be lost by delaying the sowing. Make the rows twelve to fourteen inches apart. Thin to three or four inches apart, or transplant at this distance. Can be sown in hotbeds in February, or later in open ground.



ABBOTT'S IMPROVED PARSNIP

THE DON. A variety selected for handsome form, size, whiteness of skin and flesh, and solidity of texture. Specially recommended for market trade .10 .50 \$1.50

Parsnip

Sow as early in the spring as the weather will admit, in drills fifteen inches apart, covering half an inch deep. When well up thin out to five or six inches apart in rows. Unlike carrots, they are improved by frosts, and it is usual to take up in the fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug up as required.

One ounce to 150 feet of drill; 5 pounds to the acre.

Abbott's Improved. Smooth and quite large; one of the best.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.15	.50	\$1.50

Hollow Crown. Roots very long, growing mostly below the surface of the ground.

Pkt.	Oz.	1/4 lb.	Lb.
.10	.15	.50	\$1.50

Peas

Peas, for an early crop, should be sown as soon as the ground is in working condition. The soil for their reception should be light, dry and well sheltered. Mild manure has a beneficial effect, but for many of the varieties the soil cannot be too rich. For general crops, the ground should be well manured the previous year, which causes them to yield more abundantly. When

grown as a market crop, peas are never staked, and are grown in single rows, two or three inches deep, and from two to three feet apart, according to the variety or strength of the soil. When grown in small quantities for private use, they are generally sown in double rows six or eight inches apart, and the tall varieties staked up by brush.

Two pounds will plant 75 to 100 feet of drill; from 84 to 112 pounds to the acre.

Peas ordered by mail are subject to an extra

charge of eight cents per pound for postage. For larger quantities by mail, see rates on page 2 of cover.

INOCULATE THIS
SEED WITH
STIMUGERM

Extra Early

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.
Blue Bantam.....	Inches 20	Inches 4 1/2	77	Med. dark green	Pointed	Fine	1 lb. 2 lbs. 14 lbs. .45 .85 \$4.75
Early Eight Weeks. (See page 18).....	14	3	55	Dark green	Blunt	Good	.35 .60 3.50
Early Morn.....	36	4	73	Med. light green	Med. pointed	Fine	.35 .60 3.50
Gradus.....	36	4	73	Med. light green	Med. pointed	Fine	.35 .60 3.50
Laxtonian.....	19	4 1/2	76	Med. dark green	Med. pointed	Fine	.45 .85 4.75
Laxton's Progress.....	18	4	72	Med. dark green	Pointed	Fine	.45 .85 4.75
Little Marvel.....	18	3 1/2	76	Med. dark green	Blunt	Fine	.35 .60 3.50
Nott's Excelsior.....	15	3	72	Med. light green	Blunt	Fine	.35 .60 3.50
Peter Pan.....	18	4	76	Med. dark green	Pointed	Fine	.45 .85 4.75
Sutton's Excelsior.....	18	4	78	Med. dark green	Blunt	Fine	.35 .60 3.50
Sutton's Pioneer.....	16	4	76	Dark green	Pointed	Fine	.45 .85 4.75
Thomas Laxton.....	32	3 3/4	73	Med. light green	Med. pointed	Fine	.35 .60 3.50
World's Record.....	36	4	69	Med. light green	Med. pointed	Fine	.35 .60 3.50

PEAS—Continued.

Second Early

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.
Bliss' Everbearing	36	3	85	Light green	Blunt	Fine	1 lb. 2 lbs. 14 lbs. .35 .60 \$3.50
Dwarf Telephone	30	4 $\frac{3}{4}$	82	Med. light green	Med. pointed	Fine	.35 .60 3.50
Onward	36	4	80	Dark green	Pointed	Fine	.50 .90

General and Late Crop

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.
Admiral Dewey	60	4 $\frac{3}{4}$	87	Dark green	Pointed	Fine	1 lb. 2 lbs. 14 lbs. .35 .60 \$3.50
Carter's Telephone (improved dark pod)	63	4 $\frac{1}{2}$	83	Dark green	Pointed	Fine	.35 .60 3.50
Carter's Quite Content	48	4 $\frac{1}{2}$	83	Dark green	Pointed	Fine	.40 .75 4.00
Mammoth Sugar (edible pods)	48	4	95	Med. green	Med. pointed	Fine	.40 .75
The President	20	4 $\frac{1}{2}$	74	Med. dark green	Med. pointed	Fine	.45 .85 4.75

Field Varieties

Variety.	Height of Vine.	Length of Pod.	Days to First Pick'g.	Color of Vine.	Shape of Pod.	Quality.	Price.
Black-Eyed Marrowfat	48	3 $\frac{1}{2}$	98	Light green	Blunt	Fine	15 lbs. 60 lbs. \$2.40 \$9.00
White Canada	48	3	95	Light green.	Blunt	Poor	1.25 5.00
White Marrowfat	48	3 $\frac{1}{2}$	98	Light green.	Blunt	Fine	2.40 9.00

Pepper

Grown largely for pickles. Sow in hotbeds early in April and transplant to the open ground when the weather is warm and settled. The rows should be two feet apart and the plants fifteen inches apart in the rows. Rich, warm, mellow soil.

One ounce of seed will produce about 2,000 plants.

		Pkt.	Oz.
Large Bell.	Large and mild flavor; ripens bright red. Used for stuffed peppers.....	.10	.50
Long Red Cayenne.	Bright red; very productive; the flesh very pungent.....	.10	.75
Monstrous Sweet Spanish.	A very attractive, red, sweet pepper. The plants are about two and one-half feet high, upright, very compact, vigorous and productive. The fruits are very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. The color is deep green when fruit is young, rich red when ripe .....	.10	.85
Sweet Mountain or Mammoth.	Similar to the Bell, but larger .....	.10	.85

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Potatoes (Maine Grown)

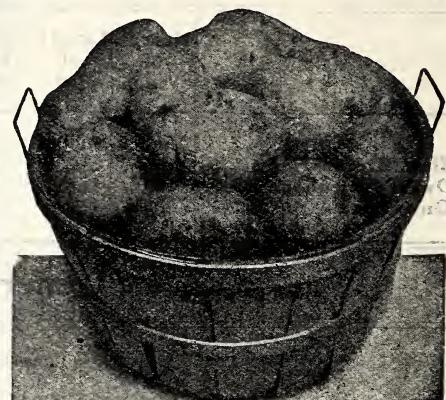
10 to 12 bushels, or about 4 barrels, sufficient for one acre. One peck will plant 75 hills.
Prices quoted on application.

Improved Green Mountain. (Certified.) Improved by careful selection of seed. In season it is medium; one of the best yielders and keeps well; color white, form round or oval, smooth skinned and a heavy yielder.

Irish Cobbler. (Certified.) One of the most reliable of the early varieties. Cream-white color, vigorous grower, ripens uniformly and a good keeper.

Certified potatoes have been examined by state inspectors, twice in the field and once after being harvested, and are certified by them to be true to name and as free as possible from disease.

For increased yield, treat seed before planting with Semesan Bel. See page 20.



Pumpkin

Same cultivation as for cucumbers and melons.

One ounce for 20 to 25 hills; 3 pounds for an acre.

Connecticut Field. Large; used for stock. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 35c.; Lb., \$1.00.

Mammoth King. The best large pumpkin in use. Immense, globular shaped, flattened a little at the end. Skin reddish yellow in color, and flesh rich orange. This is unquestionably the best mammoth pumpkin, running very uniform in shape and color. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 45c.; Lb., \$1.50.

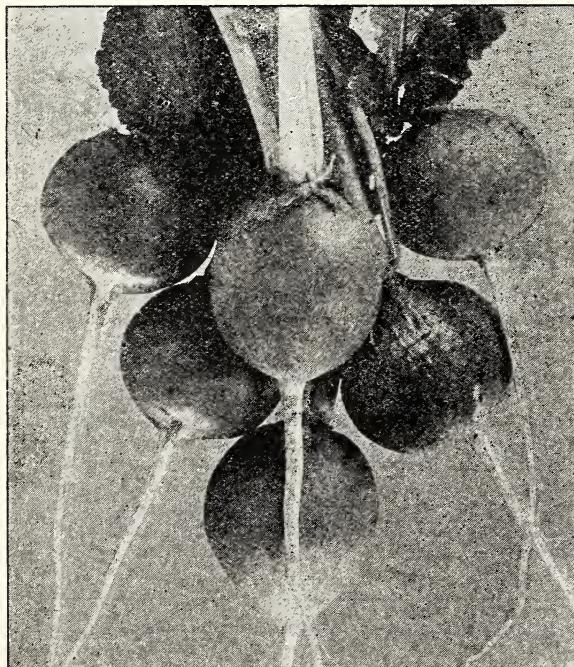
Mammoth Tours. Grows to enormous size, frequently weighing from 100 to 150 pounds. Oblong in shape, and is mainly used for feeding stock. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 45c.; Lb., \$1.50.

Quaker Pie. A creamy-white, pear-shaped pumpkin of rich flavor and a good keeper. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 60c.; Lb., \$2.00.

Sugar or New England Pie. For making pies this variety cannot be excelled. The pumpkins are small, but very sweet, fine-grained and of the best quality. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 40c.; Lb., \$1.25.

Winter Luxury. Generally regarded as the finest quality pie pumpkin. Besides its high quality it is the best winter keeper of all. In size about nine or ten inches in diameter; skin is a beautiful deep orange yellow. Price: Pkt., 10c.; Oz., 20c.; $\frac{1}{4}$ lb., 60c.; Lb., \$2.00.

Radish



SCARLET TURNIP RADISH (white tip)

Radishes thrive best in a light, rich, sandy loam; heavy or clayey soils not only delay their maturity, but produce crops much inferior, both in appearance and flavor. For a successive supply, sow from the middle of April until September, at intervals of two or three weeks. For an early supply they may be sown in a hotbed in February.

One ounce for 100 feet of drill.

Pkt. Oz. $\frac{1}{4}$ lb. Lb.

Crimson Giant Forcing. Rich crimson

color, flesh white and solid, and of a mild and delicious flavor. Grows to a large size without becoming pithy. Excellent for forcing. .10 .15 .45 \$1.50

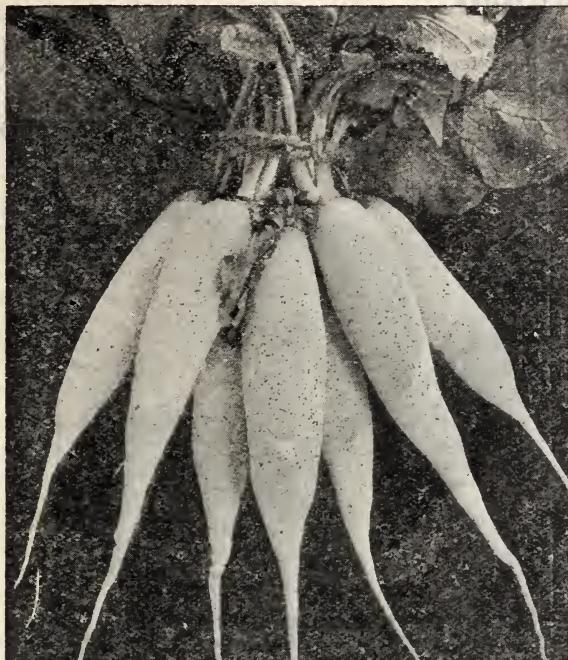
Early Scarlet Globe.

Fine for forcing. Shape roundish oval; large brilliant red; flesh white, solid, crisp and mild.10 .15 .45 1.50

Early Scarlet Turnip

(white tip). Handsome bright scarlet color, with white tip.10 .15 .45 1.50

RADISH—Continued



ICICLE RADISH

Pkt. Oz. $\frac{1}{4}$ lb. Lb.

Early Scarlet Turnip.

Round, scarlet, small, short top, mild and crisp..... 10 .15 .45 \$1.50

French Breakfast.

A variety of quick growth; very mild and tender. One of the best for forcing. 10 .15 .45 1.50

Icicle.

Quick growing; clear white. Fine for forcing..... 10 .15 .45 1.50

Non Plus Ultra.

The earliest forcing radish; extra early, maturing in about twenty days; round, bright red, with small tops; very mild. 10 .15 .45 1.50

Rhubarb

Sow in drills eighteen inches apart and one inch deep. Thin out the plants to six inches apart. In the fall prepare the permanent bed by trenching two feet deep, mixing a liberal quantity of manure with the soil. Into this set

the plants about five feet apart each way. The stalks should not be cut until the second year.

One ounce should give about 500 plants.

Linnaeus. Early, large, tender and of very fine quality. Price: Pkt., 10c.; Oz., 25c.

Spinach

For spring and summer use, sow in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession. For winter and early spring use, sow in September in well-manured ground; cover with straw on the approach of severe cold weather. The New Zealand spinach, which requires more room, may be started from seed early in spring to give greens during the heat of summer.

One ounce to 50 feet of drill; 10 to 12 pounds to the acre.

Fall or Winter. One of the hardest for fall planting. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 25c.; Lb., 75c.

King of Denmark. For quick growth, fine appearance, and lasting qualities, it is the best

early variety. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 30c.; Lb., 85c.

Long Standing. Dark green; the longest standing before going to seed. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 25c.; Lb., 75c.

New Zealand. Of branching habit; makes a very large plant, which stands drouth well. Leaves thick and fleshy, enduring the entire summer. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 40c.; Lb., \$1.25.

Round Thick-Leaved. A valuable variety, with thick, dark green leaves; long standing and hardy. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 25c.; Lb., 75c.

Market gardeners, and others using large quantities, are requested to write for special quotations.

Salsify (Oyster Plant)

Commonly called vegetable oyster. Used stewed, boiled or fried. When cooked has an oyster flavor. Sow early in drills fifteen inches apart; cover the seeds with fine soil, an inch and a half deep.

One ounce to 50 feet of drill.

Mammoth Sandwich Island. Price: Pkt., 10c.; Oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Squash

Any good, rich soil is adapted to the growth of the squash. They only thrive well in a warm temperature, as all the varieties are tender annuals, and the seed should not be sown in the spring until all danger from frost is past and the ground is warm and thoroughly settled.

The hills for bush varieties should be about six feet apart; for running sorts, ten feet. Leave two plants to a hill.

Running varieties, 1 ounce to 20 hills; 4 pounds per acre. Bush varieties, 1 ounce to 50 hills; 2 pounds per acre.



Boston Marrow. A much esteemed variety; a good keeper and of excellent flavor. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Delicious. In color it closely follows the Hubbard, and in thickness of flesh it surpasses nearly every variety. No squash compares with it in fineness and compactness of grain, dryness and sweetness and richness of flavor. It is a fall and winter squash, but does not acquire its best qualities until winter. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Hubbard. Standard winter squash, a general favorite and grown more extensively than any other late variety. Color dark green, shell extremely hard, flesh dry, fine grained and sweet; excellent keeper. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Hubbard, Blue. Hard shell, light blue in color, thick meat, dry and fine quality. Favorite

winter sort. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Hubbard, Golden. Similar to Green Hubbard, of a rich orange-red color, and of fine flavor. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Hubbard, Warted. Dark green color, shell hard and warted; good keeper. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Mammoth Chili. Grows to a large size, often weighing over two hundred pounds; excellent for stock. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 50c.; Lb., \$1.75.

Summer Crookneck. Early, productive and of good quality; color, orange yellow. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 40c.; Lb., \$1.50.

Yellow Bush Scalloped. An early market variety; excellent for shipping. Price: Pkt., 10c.; Oz., 15c.; $\frac{1}{4}$ lb., 30c.; Lb., \$1.00.

Tomato

This vegetable is one of the most important of all garden products. They thrive best in a warm, light, rich soil. For early plants, sow about the first week in March in a hotbed, or in boxes or pots in a warm window. When the plants are about two inches high, set four inches apart in boxes three inches deep, or pot singly. If again transplanted before setting out, the plants will be still more stocky. Set out in the open ground about the first of June, four feet apart each way, using a shovelful of rotted manure in each hill.

Early, prolific and uniform in shape and size. Price: Pkt., 10c.; Oz., 35c.; $\frac{1}{4}$ lb., \$1.00.

Burbank's Early. A new variety; considered to be the earliest tomato grown. Price: Pkt., 10c.; Oz., \$1.00.

Chalk's Early Jewel. A fine second early tomato, about ten days later than Earliana. Fruit large size and fine flavor. The plants are compact and strong; one of the best for shipping and the home garden. Price: Pkt., 10c.; Oz., 35c.; $\frac{1}{4}$ lb., \$1.00.

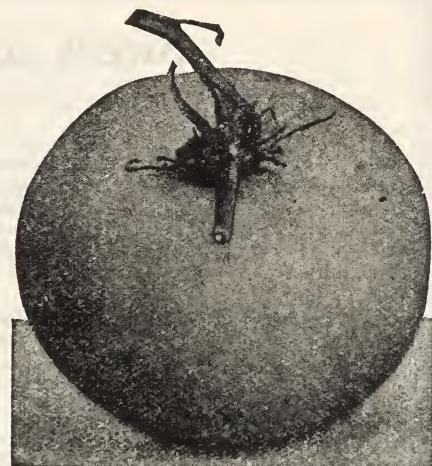
Dwarf Champion. Dwarf variety; fruit medium size, resembling the Acme in color. Price: Pkt., 10c.; Oz., 35c.; $\frac{1}{4}$ lb., \$1.00.

One ounce will produce about 2,000 plants.

Bonny Best. Color an intense scarlet. It is roundish and slightly flattened at stem end.

TOMATOES—Continued

	Pkt.	Oz.	1/4 lb.	
Dwarf Stone. The largest fruited of the dwarf varieties, the fruit being of a bright scarlet, and growing in clusters; flesh very solid, firm and smooth	.10	.35	\$1.00	
EARLIANA. A very large early tomato. Its large size, handsome shape, beautiful red color, and fine quality are unsurpassed by any of the best early and medium sorts. ....	.10	.35	1.00	
Early Avon. Earlier than Earliana. Of fine quality, fruit round, bright scarlet and borne in clusters. (See page 20) ....	.10	\$1.00		
John Baer. An early variety. Smooth, solid fruit, brilliant red in color.....	.10	.50	1.50	
Marglobe. A new disease resistant tomato, second early in maturity, fruit large, smooth, globular, and nearly coreless. Color red. A fine variety for the market gardener. ....	.10	1.00		
Red Cherry. A small, early variety, size and shape of a cherry; for pickling. ....	.10	.35	1.00	
Yellow Plum. Similar to Red Cherry, excepting color bright yellow.....	.10	.35	1.00	



EARLIANA TOMATO

Tobacco

One ounce is sufficient for an acre.

	Pkt.	Oz.	1/4 lb.
Connecticut Seed Leaf. One of the best varieties. The leaves are of good width and length and grow closely on the stalk. ....	.10	.30	\$1.00

Turnip

Turnips thrive best in rich, sandy, gravelly soil. The earliest varieties can be sown as soon as the ground can be worked, either in drills or broadcast. For a succession sow at intervals of a fortnight until the last week in July for the fall and main crops. To keep the roots fresh during the winter, they may be placed in a cool, dry cellar and buried with dry sand.

One ounce for 150 feet of drill; 1½ to 2 pounds in drills or 2½ to 3 pounds broadcast to the acre.

	Pkt.	Oz.	1/4 lb.	Lb.
Early White Six Weeks. Pure white; very early. ....	.10	.15	.40	\$1.00

Golden Ball. A rapid grower of excellent flavor; bright yellow, good keeper and a superior table variety.10	.15	.40	1.00
---	-----	-----	-----	------

Purple-Top Milan. The earliest variety in cultivation. Flesh white, hard, and of excellent quality....	.10	.20	.60	2.00
---	-----	-----	-----	------

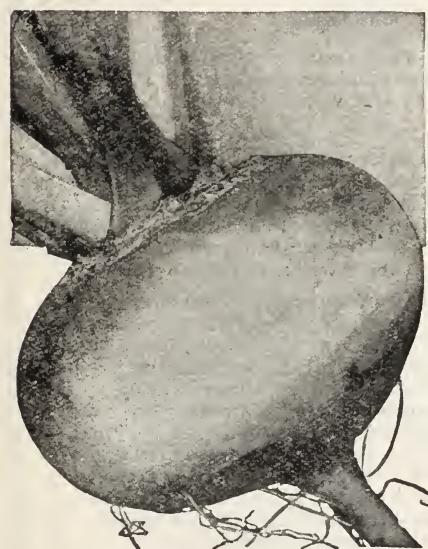
Purple-Top Strap Leaf. Excellent variety for main crop, equally good for spring or fall sowing; white flesh.10	.15	.40	1.00
--	-----	-----	-----	------

Purple-Top White Globe. Globular shape, handsome and of superior quality either for the table or stock. It is a heavy producer, early and a good keeper. The flesh is white and skin white with purple at portion which grows above the ground.....	.10	.15	.40	1.00
--	-----	-----	-----	------

Ruta Baga or Swede Turnip	.10	.15	.40	1.00
----------------------------------	-----	-----	-----	------

Carter's Imperial Hardy Swede. An improvement upon the other varieties, being larger, the flesh firmer, and an excellent keeper.

Sutton's Magnum Bonum (purple-top). The finest type of Purple-top Swede that can be grown for general purposes, as it not only yields a great weight per acre, but the crop remains sound for an unusually long time. The feeding value is very high, analysis showing the roots to contain 12.5 per cent. of dry matter.....



PURPLE-TOP WHITE GLOBE

Sweet and Medicinal Herbs

Sow in spring, in shallow drills, one foot apart, and when well up thin out or transplant to a proper distance apart.

	Pkt.		Pkt.	
Anise.	Annual .....	.10	Fennel, Sweet, Perennial..	.10
Balm.	Perennial .....	.10	Horehound. Perennial ..	.10
Basil, Sweet.	Annual.....	.10	Hyssop. Perennial .....	.10
Caraway.	Biennial .....	.10	Lavender. Perennial .....	.10
Catnip.	Perennial .....	.10	Marjoram, Sweet. Annual	.10
Coriander.	Annual .....	.10	Mint .....	.10
Dill.	Biennial .....	.10	Rue. Perennial .....	.10
			Saffron. Annual .....	.10
			Sage. Annual .....	.10
			Summer Savory. Annual..	.10
			Thyme. Perennial .....	.10
			Wormwood. Perennial ....	.10

Grass Seed and Clover

Timothy. The most popular grass to sow for hay.

Red Top. Succeeds in almost any situation. Fine for lawns or to sow with timothy for hay.

Kentucky Blue Grass. One of the best grasses for pastures and lawns.

Orchard Grass. A valuable grass for pasture and also for hay.

Red Clover. Used both in mixtures for hay and for pasture.

Alsike Clover. More hardy than red clover and succeeding well where the ground is low and wet.

White Clover. Used largely for lawns and in pasture mixtures.

Crimson Clover. An annual clover used for plowing under to enrich the soil.

Forage Seeds, Grain, Etc.

AT THE LOWEST MARKET RATES AND OF THE BEST QUALITY

Barley (Both two-row and six-row). The two-rowed variety has a head a little longer than the six-rowed varieties and the grain is large, plump, extra heavy. On account of its attractive appearance and fine quality, the grain brings the highest price, and is also extensively grown for green fodder.

Buckwheat (Japanese). The most desirable variety. If sown at the same time as the Silver Hull it will ripen earlier and yield nearly double the amount. It is of much stronger growth than the common buckwheat and the kernels are fully twice the size.

Millet (Japanese Barnyard). Succeeds in almost any ordinary soil, and may be sown from the middle of May to the first of July. Is distinct from other varieties. Enormous crop, and is excellent, either green or cured, for hay. Exceedingly popular as a forage plant.

Millet (Hungarian). Probably used more than any other millet for fodder during the summer months. Remains green when almost all other vegetation has dried up. It is one of the very best plants for green fodder or for ensilage; makes hay of good quality.

Soudan Grass. A new annual forage crop. Soudan grass is a drought-resistant hay crop of great merit. In dry sections it yields more forage than millet, and the hay is relished by stock of all kinds. After the ground has become warm, seed may be sown broadcast at

the rate of from 16 to 24 pounds per acre; if planted in drills 18 to 24 inches apart, from 4 to 6 pounds per acre will be sufficient.

Swedish Type Oats. One of the best varieties for home use or market. It is a heavy yielder, with stiff straw, thin hull, and stands dry weather well.

Gantun Oats. One of the most productive varieties of oats ever introduced. The straw is very firm, stiff and elastic and does not readily lodge. Early and ripens uniformly. The kernel is large and plump, with a thin hull, and of fine general appearance.

Rosen Rye (Winter). Produces a strong, vigorous straw and stools to a remarkable degree. The grain is large, plump, heavy and of beautiful color, commanding a premium on the market over other grains. Owing to its vigorous stooling property less seed is required, the practice being about $1\frac{1}{2}$ bushels per acre. At the State Experimental Farm in Michigan, for a number of years the average yield has been 41.3 bushels per acre, of an exceptionally high quality of grain, and 46 bushels per acre is not an unusual yield.

Rye (Spring). For a catch crop this is best for sowing in the spring, as a crop may be obtained by later sowing than any other grain, although it does not yield as heavily as the winter rye.

For increased yield treat all grain with Ceresan. See page 20.

FORAGE SEEDS, GRAINS, ETC.—Continued

Marquis Wheat (Spring). A variety produced by scientific cross-breeding of the hard Calcutta and frost resisting Red Fife variety. First introduced by the Central Experiment Station in Ottawa, Canada, and has since rapidly displaced many other varieties in the Northwest and in Canada. In appearance Marquis wheat is similar to Red Fife, but the heads as a rule are heavier and the stalks shorter, making it less likely to lodge. The kernel is flinty, a little darker red and more plump than Fife. It is beardless, having smooth yellow chaff, but its most valuable

Write for quotations on all grain and grass seeds.

Cow Peas

The seed resembles a small brown bean in appearance, and is one of the best varieties to sow, as it is extremely early, a good cropper, and produces more seed pods than most other kinds. A very valuable forage plant. Sow at the rate of $1\frac{1}{2}$ bushels per acre.

Write for price.

Early English Dwarf Essex Rape

Superior to any other variety offered.

A forage plant of great merit, easily grown in any locality, and one of the most satisfactory quick-growing crops, especially for sheep.

As a fattening food for sheep, cattle, calves or pigs, it is without a rival in point of cheapness, is hardy, withstands drought, and will produce a crop in any soil. The seed may be sown from May to July, 10 to 12 pounds per acre.

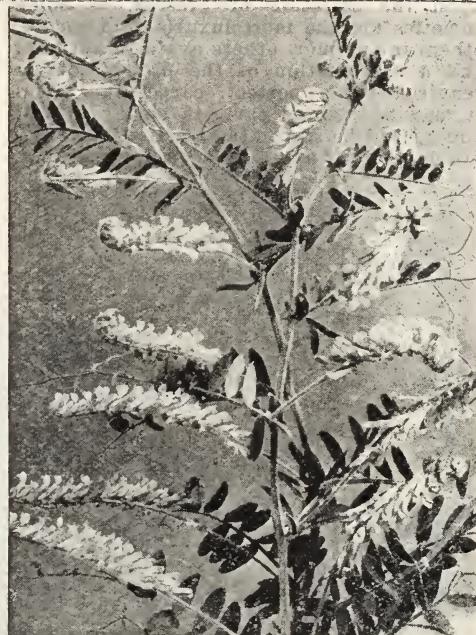
Per lb., 20 cts. Per 100 lbs., \$18.00.



Soja or Soy Beans

All Legumes—Inoculate, for Best Results, with Nitrogen Fixing Bacteria

feature lies in its earliness, as it matures a week or ten days earlier than the Red Fife. Thrashing reports from the Northwest indicate yields of 40 to 50 bushels per acre; weight, 64 to 66 pounds per measured bushel, and they report it to be of the highest milling quality. Not in many years has such a valuable variety been introduced. Our stock is of the highest purity and germination. Farmers who planted Marquis wheat in New England last season had most satisfactory returns.



Vetches

Vetches or Tares

Spring Vetches. Highly valuable for soiling or for green manuring. Sometimes grown with oats for mowing and feeding to stock. Use 120 to 180 pounds to the acre broadcast, or 60 to 120 pounds in drills.

Winter Vetches. Also called Sand Vetch or Hairy Vetch. Recommended for fall sowing with rye, which serves as a support. It is perfectly hardy in all parts of the country, can be harvested or plowed under and the ground used for the usual spring crop. Sow 60 pounds of the seed per acre, together with $\frac{1}{2}$ bushel of rye.

Soja Beans

Produce an enormous crop of both vines and pods. Valuable as a forage crop, and for fertilizing the soil, also for pasturing, feeding as green fodder, and for silo purposes. Sow $\frac{1}{2}$ bushel to the acre.

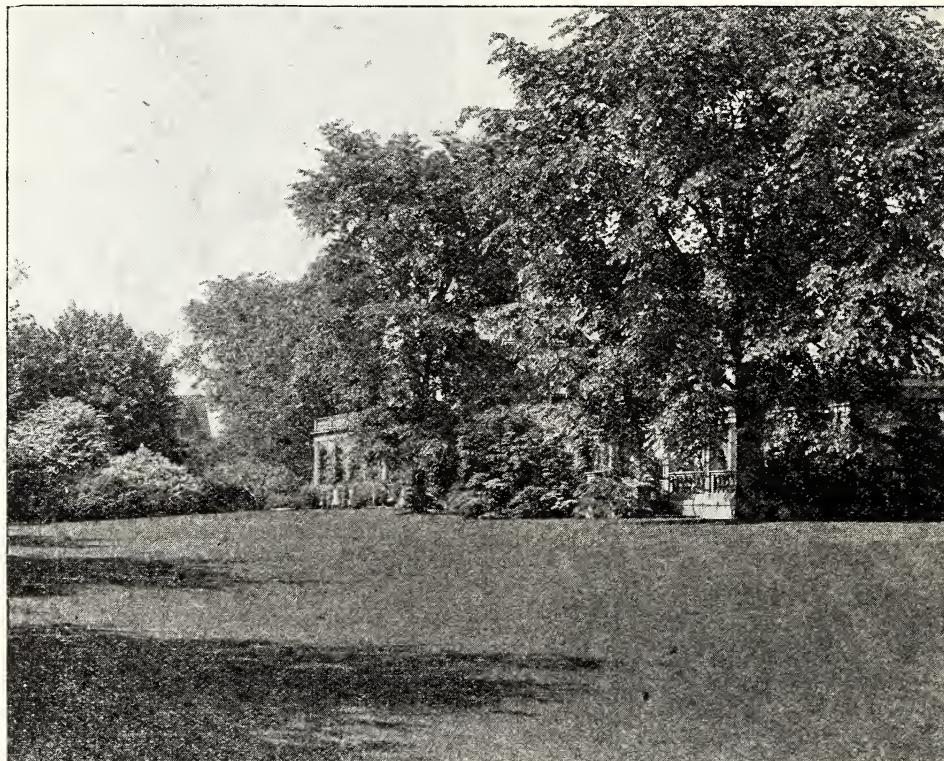
Write for price.

K. & W. Lawn Grass Seeds

The essentials for a fine lawn are: First, a rich, well-drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or cold weather or to the direct rays of the hot summer sun. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sort is required for a perfect, carpet-like lawn. It may be planted early in spring or fall and should be sown at the rate of seventy-five pounds per acre. If sown in the spring,

sow as early as possible, making the surface very fine and smooth, then raking it over and sowing the seed just before a rain, which if the surface has just been raked will cover the seed sufficiently. For fall seeding, sow before the autumn rains and early enough to enable the young grass to become well established before very cold weather, when a light dressing of manure should be given. Weight per bushel, about 25 pounds.

Many low-priced grass seed mixtures weigh only fourteen pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell—in other words, so many less seeds to the quart or pound that will germinate and grow real grass.



1 lb. to 300 square feet.

PRICES 1 lb., 50c.; 5 lbs., \$2.40; 10 lbs., \$4.60; 25 lbs., \$11.00

Fair Green Mixture

Price—Per lb., 55c.; per 100 lbs., \$45.00

Shady Spot Lawn Seed

Price—Per lb., 60c.; per 100 lbs., \$55.00

If sent by mail, add eight cents per pound for postage, and for larger shipments by mail, see parcel post rates on page 2 of cover.

Putting Green Mixture

Price—Per lb., 80c.; per 100 lbs., \$75.00

Books on Rural Topics

All books sent postpaid on receipt of price.

Agriculture

Farm Grasses of the U. S.	\$1.75
Farm Manures	2.00
Farmers' Cyclopedias of Agriculture	4.50
Fertilizer (new)	1.25
Soils	1.75
Study of Corn	1.00
The Right Use of Lime in Soil Improvement	1.25
The Young Farmer: Some Things He Should Know	2.00

Fruit Growing

American Apple Orchard	\$1.75
American Fruits (new)	4.75
Bush Fruit Production (new)	1.25
Modern Fruit Marketing	1.75
Pear and Its Culture	1.25
Principles and Practice of Pruning	2.50
Strawberry, The (new)	1.25

Dairying and Live Stock

Cheese Making (new)	\$3.00
Farm Dairying	2.00
First Principles of Feeding Farm Animals	2.00
Questions and Answers on Butter Making	1.00
Swine in America	3.50

Practical Manuals for Vegetable and Flower Garden

Asparagus	\$1.00
-----------	--------

Bean Culture	1.00
Book of Evergreens (new)	1.25
Cabbage, Cauliflower and Allied Vegetables	1.00
Celery Culture	1.00
Dahlia Production (new)	1.25
The Gladiolus (new)	1.25
Hardy Shrubs (new)	1.25
The Iris (new)	1.25
Garden Guide	1.10
Milady's House Plants	1.10
Muskmelon Production	1.25
Mushroom Growing	2.00
New Onion Culture	1.00
Peas and Pea Culture	1.00
Book of Landscape Gardening	2.00
Roses and Their Culture (new)	1.25
Spring Flowering Bulbs (new)	1.25
Starting Early Vegetable and Flower Plants under Glass (new)	2.25
The Potato	1.10
Tomato Production (new)	1.25
Vegetable Forcing	2.50
Vegetable Gardening	2.50

Poultry Books

A Living from Eggs and Poultry	\$1.40
Canary Birds	.60
Poultry Breeding and Management	2.00
Ducks and Geese (new)	2.00
Turkey Raising (new)	1.75

Valuable Table Showing the Quantity of Seed Usually Sown upon an Acre.

	Lbs. per bush.
Alfalfa	.60
Barley (broadcast)	.48
Beans, Dwarf, in drills	.60
Beans, Pole, in hills	.60
Beets, Mangold Wurzel	5 lbs.
Beets, Table, in drills	6 lbs.
Buckwheat	48
Cabbage, in beds to transplant	4 to 5 oz.
Carrot, in drills	3 to 4 lbs.
Clover, Alsike	60
Clover, Crimson	60
Clover, Red	60
Clover, White	60
Corn, for fodder, in drills	56
Corn, Sweet, in hills	50
Creeping Bent	20
Crested Dogtail	21
Cucumber, in hills	2 lbs.
English Rye Grass	24
Fine-leaved Fescue	35 lbs.
Hard Fescue	30 lbs.
Hungarian	48
Italian Rye Grass	18
Kentucky Blue Grass	14
Lawn Grass	25
Meadow Fescue	15
Meadow Foxtail	7
Melon, Musk, in hills	2 to 3 lbs.
Melon, Water, in hills	4 to 5 lbs.
Millet, German	50
Millet, Japanese	about 40
Oats, broadcast	32
Onion, in drills	5 lbs.

	Lbs. per bush.
Onion Sets, in drills	32
Orchard Grass	14
Parsnip, in drills	5 lbs.
Peas, smooth (field varieties), broadcast	60
Peas, wrinkled, in drills	56
Perennial Rye Grass	24
Potatoes (cut tubers)	60
Pumpkin, in hills	3 lbs.
Radish, in drills	8 to 10 lbs.
Rd Top (recleaned)	about 32
Rhode Island Bent, chaff seed	10
Rhode Island Bent (fancy recleaned)	40
Rough Stalked Meadow	14
Rye, broadcast	56
Sage, in drills	8 to 10 lbs.
Sheep Fescue	12
Spinach, in drills	10 to 12 lbs.
Squash (bush varieties), in hills	2½ lbs.
Squash (running varieties), in hills	4 lbs.
Soudan Grass (broadcast)	16 to 24 lbs.
Sweet Vernal (annual)	10
Sweet Vernal (perennial)	10
Tall Fescue	14
Tall Meadow Oat Grass	14
Timothy	45
Tobacco	1 oz.
Tomato, to transplant	4 oz.
Turnip, broadcast	2½ to 3 lbs.
Turnip, in drills	1½ to 2 lbs.
Various Leaved Fescue	30 lbs.
Vetches	(See page 43)
Wheat, broadcast	60
Wood Meadow	14

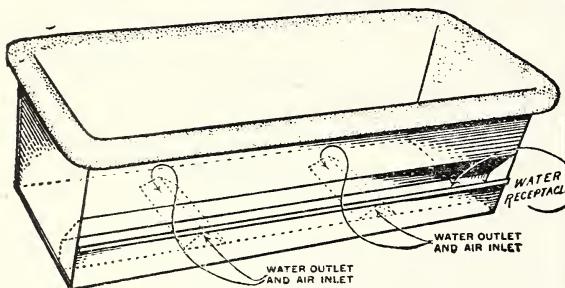
Quantity of Seeds Required for a Given Number of Hills or Length of Drills.

Asparagus	1 ounce
Beet	1 ounce
Beans, Dwarf	2 pounds
Beans, Pole	2 pounds
Carrot	1 ounce
Celery	1 ounce
Corn, Sweet	1 pound
Cress	1 ounce
Cucumber	1 ounce
Dandelion	1 ounce
Kale	1 ounce
Kohl-rabi	1 ounce
Leek	1 ounce
Lettuce	1 ounce
Martynia	1 ounce
Melon, Water	1 ounce

Melon, Musk	1 ounce
Mustard	1 ounce
Okra	1 ounce
Onion	1 ounce
Onion Sets	1 pound
Parsley	1 ounce
Parsnip	1 ounce
Peas	2 pounds
Pumpkin	1 ounce
Radish	1 ounce
Salsify	1 ounce
Spinach	1 ounce
Squash, bush variety	1 ounce
Squash, running variety	1 ounce
Turnip	1 ounce

Success Window Box

THE BOX THAT MAKES THE PLANTS GROW

**PRICES**

24-inch.....	\$ 1.50	By mail \$ 1.67
30-inch.....	2.00	By mail 2.19
36-inch.....	2.75	By mail 2.95

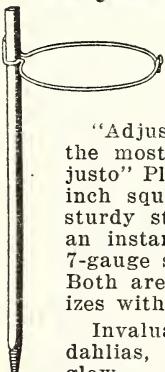
Lamco Window Box

A good box at a low price. Made of galvanized iron, finished in green.

PRICES

24-inch.....	\$.90	By mail \$ 1.05
30-inch.....	1.00	By mail 1.15
36-inch.....	1.25	By mail 1.45

Adjusto Plant Support



Is your garden ship-shape and trim, or is it a wild mass of disordered growth with half its beauty lost in confusion?

"Adjusto" Plant Supports help you get the most out of your garden. This "Adjusto" Plant Support consists of a stake $\frac{3}{8}$ inch square, 3, 4, 5, or 6 feet long; a sturdy stake pointed at the bottom and an instantly adjustable patented loop of 7-gauge strong spring wire for supporter. Both are painted a green which harmonizes with the green of the garden.

Invaluable for peonies, delphiniums, dahlias, asters, roses, sunflowers, golden-glow.

Prices per Doz.

3 ft., \$2.40; 4 ft., \$3.00; 5 ft., \$3.60; 6 ft., \$4.20

Plant Stakes

From one and one-half to six feet in length, used for supporting single stalks of roses, dahlias, etc.

SQUARE STAKES

	Per doz.	Per 100
1 $\frac{1}{2}$ feet, painted green, tapered,	\$.30	\$ 2.00
2 " " " "	.40	3.00
2 $\frac{1}{2}$ " " " "	.60	4.50
3 " " " "	.95	7.00
4 " " " "	1.50	11.00
5 " " " "	2.10	16.00
6 " " " "	2.35	18.00

BAMBOO STAKES

	Per doz.	Per 100
5 feet, Natural Color	\$.75	\$ 5.00
4 feet, Green .....	.35	1.50
3 feet, Green .....	.25	1.25
1 $\frac{1}{2}$ feet, Green .....	.12	.60

Standard Flower Pots



Inches	Pots Per dozen	Saucers Per dozen
2	\$.18	
2 1/2	.25	
3	.35	\$.28
3 1/2	.40	.35
4	.50	.38
5	.85	.50
6	1.25	.70
7	2.10	.95
8	3.00	1.25
9	4.75	1.80
10	5.85	2.10
11	9.25	2.50
12	12.50	3.10
14	21.00	5.40

Measurement from inside to inside. Width and depth equal.

Improved
Neponset Paper Flower Pots

Advantages over earthenware pots:

1. They save all losses from breakage.
2. Weigh just one-tenth as much.
 - (a) Easier to handle.
 - (b) Reduce freight and express bills.
3. Hold moisture better.
4. Much less expensive.

Pots are made from a tough, lasting and thoroughly waterproof paper.

Ideal for transplanting and shipping potted plants and for rooting or shipping strawberry, tomato and cabbage plants.

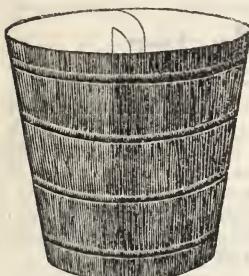
Size	Per doz.	Per 100	Per 1,000	Per	
				doz.	100
2 1/4	\$.08	\$.45	\$3.50	4	\$.18
2 1/2	.10	.50	4.10	5	.30
3	.12	.70	5.50	6	.35
3 1/2	.15	.85	7.25		

Round Seed and Bulb Pans

Inches	Each	Per doz.	Inches	Each	Per doz.
6	\$.11	\$1.25	9	\$.45	\$4.75
7	.20	2.10	10	.55	5.85
8	.28	3.00	12	1.20	12.50

Bird's Flower-Pot Covers

A cover that is practical, decorative, and inexpensive. Sizes to fit 4-inch, 5-inch, 6-inch standard pots. Regular cover green.



Regular Cover

Special covers for Christmas, Mothers' Day and Easter.

PRICES

Per	Per
100	Doz.
4-inch	\$3.00
5-inch	3.25
6-inch	4.00

By mail add 16c. per 100

or

8c. per doz. for postage.

Kristee

All Rubber

Flower Pot Trays

Waterproof, moisture proof, protects tables from dampness and sweating. No more ring marks or scratches.

4 3/4 in. 15c. 6 1/4 in. 25c. 9 1/4 in. 50c.

By mail 18c. 31c. 57c.



Trellises

VERANDA TRELLIS

5x1 1/2 ft.....	\$1.70	\$20.00
6x1 1/2 ft.....	2.10	24.00
7x1 1/2 ft.....	2.35	28.00
8x1 1/2 ft.....	2.70	32.00
9x1 2-3 ft.....	3.05	36.00
10x1 2-3 ft.....	3.35	40.00
11x2 ft.....	3.70	44.00
12x2 ft.....	4.10	48.00

K. & W. SPECIAL LATTICE VERANDA

6 1/2 ft.	\$1.65	\$18.00
7 1/2 ft.	1.75	19.00
8 1/2 ft.	2.00	21.00

FAN TRELLIS

1 1/2 ft., width at top 6 inches,	\$.30	\$ 3.50
2 " " " 10 "	.45	5.00
2 1/2 " " " 13 "	.60	7.00
3 " " " 16 "	.95	11.00
3 1/2 " " " 21 "	1.20	14.00
4 " " " 27 "	1.50	17.50
5 " " " 32 "	1.80	21.00
6 " " " 38 "	2.10	25.00
7 " " " 42 "	2.50	29.50
8 " " " 46 "	2.95	35.00

Veranda Trellis

Wire Plant Stands



1 shelf, folding, \$3.50

2 " " " 5.00

3 " " " 6.25

4 " " " 8.25

WICKER

STANDS

With Galvanized Iron Lining

30-inch, \$4.00 to \$5.00

See page 114

Fertilizers

Wizard Sheep Manure

Will Make Your Plants Grow to Perfection

Wizard Sheep Manure is a natural concentrated manure that makes all plants grow to perfection. It is convenient and absolutely weedless. One bag equals a whole wagon load of stable manure. There is nothing better than this weedless manure for lawns, gardens, fruit and field crops.



LAWNS. Wizard produces a thick velvety green turf of lasting beauty. In making new lawns scatter broadcast 10 pounds to every 100 square feet and rake into the surface soil. On old lawns use 6 to 10 pounds per 100 square feet.

FLOWER GARDENS. Luxuriant green foliage and a wealth of vivid colored flowers are the

result of feeding your plants Wizard.

VEGETABLES AND FRUITS. If you want a big crop of crisp, tender vegetables, be sure to use Sheep Manure. Every successful gardener knows that there is nothing better than manure for vegetables. Wizard improves the yield, color and flavor of fruit crops.

FIELD CROPS. Wizard Sheep Manure builds up the soil and produces big crops at the same time. Flows freely through a drill. Puts new life into the soil. Use 300 to 1,000 pounds per acre.

FLORISTS. Wizard is unexcelled for feeding plants grown under glass. Safe, pure, and weedless. Fine for mixing with bench and potting soil and liquid manuring. Ask for free booklet.

"CARIBEE" BRAND GOAT MANURE

An excellent fertilizer for the greenhouse, or for the lawn and garden. It is free from weeds and quickly available.

Analysis: Ammonia 1.50 to 2.00%
Phosphoric Acid .75 to 1.50%
Potash 2.00 to 4.00%

Ashes

Unleached, hard wood ashes, put up in 100 lb. bags. Especially valuable for lawns.

Agricultural Lime

WHAT WILL LIME DO?

1. Furnish much-needed plant food.
2. Render available certain forms of plant food, especially compounds containing potash, phosphoric acid and ammonia.
3. Correct acidity.
4. Promote the decomposition of organic matter by encouraging the growth and activity of micro-organisms.
5. Promote the growth of organisms that gather nitrogen from the air.
6. Improve the physical texture of the soil.

Price: 100 lb. bags, \$1.00; ton, \$13.00.

TENNESSEE

Phos-Pho-Flour

What It Is—

The finest and most readily available portion only, of finely ground high-grade phosphate rock, separated by air current and like flour in texture. It carries 60 to 65 per cent. bone phosphate of lime (B-P-L), equivalent to about 30 per cent. phosphoric acid. As a fertilizer it pays for itself by the increased yield the first season, and the beneficial effect lasts for several years. As an absorbent it is excellent, a valuable feature for dairymen.

Price: 100 lb. bags, \$1.25; ton, \$20.00.

USE POWNAL LIMESTONE

Finely ground, quick to act, comfortable to use. It also supplies Magnesia, a needed plant food.

BUY and TRY

Land Plaster

Land plaster supplies sulphur in a form readily available, and also furnishes calcium, a very important element. It greatly benefits peas, beans, cabbage, turnips, potatoes and onions. To use around the stable as a deodorizer, and to absorb the ammonia, it is of great value.

For garden crops use from 400 to 800 lbs. per acre, and for field crops about half this amount.

Price: 80 lb. bags, \$1.00; ton, \$20.00.

Special Fertilizers

For Seeding Down Grass and Grain.

Top Dressing

Corn, Potatoes, Cereals.

Agricultural Chemicals

Nitrate of Soda. 18.23 per cent. ammonia.
Sulphate of Ammonia. 24.50 per cent. ammonia.
Muriate of Potash. 48 per cent. actual potash.
Sulphate of Potash. 48 per cent. actual potash.
Ground Tankage. 6 per cent. ammonia, 30 per cent. bone phosphate of lime.
Ground Tankage. 9 per cent. ammonia, 20 per cent. bone phosphate of lime.
Plain Superphosphate or Acid Phosphate. 16 per cent. phosphoric acid.
Special Ground Bone. 2.5 per cent. ammonia, 50 per cent. bone phosphate of lime.
As prices on chemicals change frequently, please write for prices, stating kind and amount desired.



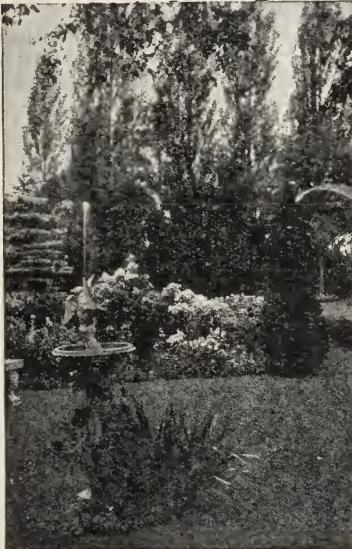
Bowker's and Bradley's Fertilizer

Supply plant food rations rightly balanced for your crops. They produce more corn, more potatoes, more truck, more money. They save labor and enable you to keep more stock. A full stock of these standard fertilizers constantly on hand, including

XL Superphosphate of Lime 3-10-4
 Northland Potato Grower 4-8-4
 Potato Manure 3-8-4
 Corn Phosphate 2-8-2
 Acid Phosphate 0-16-0
 Blood, Bone and Potash 5-8-7

Grass and Lawn Top Dressing 6-6-4
 Complete Manure for Potatoes and Vegetables 4-8-7
 Stockbridge Potato and Vegetable Manure 4-6-10
 Stockbridge Early Crop Manure 5-8-7

Also Agricultural Chemicals and Agricultural Limestone



All Plant Life Must Have Food

LIKE human beings plants require a balanced diet for normal, healthy growth.

Vigoro, the complete, scientifically prepared plant food, contains all the nourishment necessary to produce thick, velvety-green lawns; large, richly colored flowers; early, delicious vegetables; and healthy, full-foliated trees.

Vigoro is clean, odorless, and easy to use. It's economical, too! Full directions in every bag.

Prices

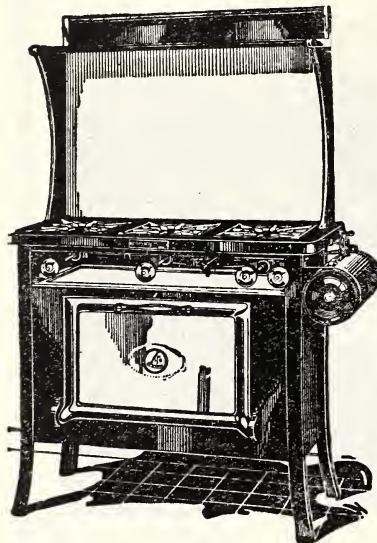
100-lb. bag	\$ 6.00
50-lb. bag	3.75
25-lb. bag	2.00
5-lb. pkg.	.60
12-oz. pkg.	.10

VIGORO
Complete plant food

A product of
 Swift & Company

For Lawns, Gardens, Flowers, Shrubbery, and Trees





Kitchenkook

City gas conveniences for homes without gas. Makes and burns its own gas from gasoline. No wicks, no dirt, no soot, no odor. Takes less than two minutes to light. Will cook anything that a city gas stove will cook and at a much less cost.

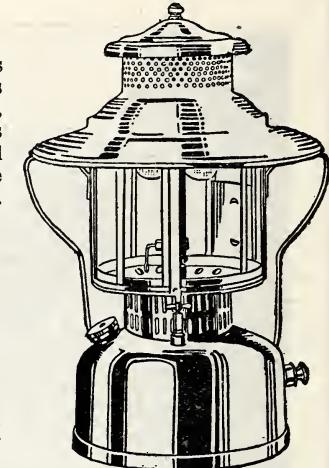
Prices

\$23.10 to \$125.00

Send for Circular

American Ready-Lite Lamps and Lanterns

Cost less than oil to use, give 25 times as much light, cleaner and safer. Can not spill nor leak, nor explode if upset. Lights instantly.



Prices—Lamps, \$10.00 to \$11.00

Lanterns, \$8.50 to \$9.00

American Kampkook

This is the perfect camp stove for all outdoor cooking. Makes and burns its own gas from gasoline. Folds like a suitcase with everything inside.

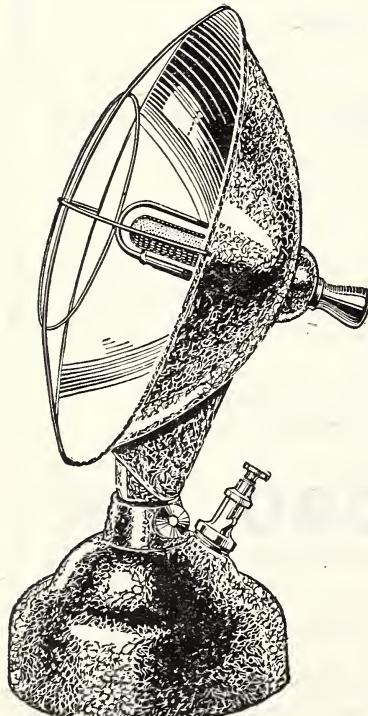
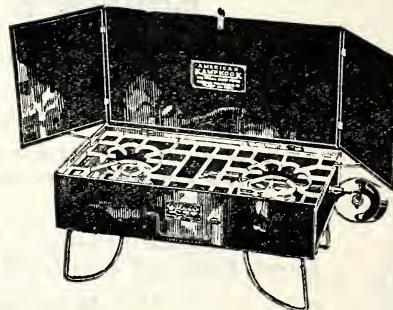
PRICES

No. 3—Two-burner, 8x14 1/2 in. top \$ 5.50

No. 77—Two-burner, 10x19 in. top 9.00

No. 99—Three-burner, 10x26 in. top.. 14.00

No. 88—Two-burner, 10x19 in. top and built-in oven 11.00



American Readyglo Heater

MAKES ITS OWN GAS—Lights With A Match

The American Readyglo is a gas heater. Like the other well-known American appliances it makes its own gas from any good grade of untreated gasoline. It lights with common matches, no other generating required. It is as simple and easy to light and operate as a Ready-Lite lamp or lantern.

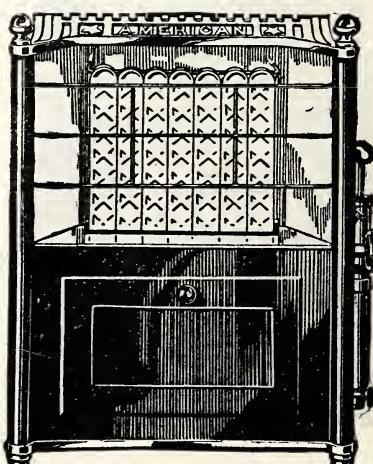
Price, \$12.60

American Radiant Heater

COSY COMFORT FOR CHILLY DAYS

It's a real gas heater—makes its own gas from gasoline. Heat regulated as you want it. Can be carried about while burning to any room in the house. No pipes, no gas tubing, no connections to make. Costs from two to three cents per hour to operate.

Price, \$26.00



Croquet Sets

We carry a complete assortment, manufactured from selected hard wood, handsomely painted and varnished.

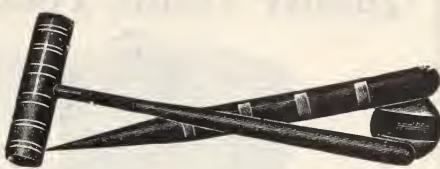
No. XA. Eight-ball set, all parts varnished, mallets painted, \$3.75.

No. 4. Eight-ball set, 5 1/2 in. mallets, selected wood, nicely finished, \$4.25.

No. 5X. Eight-ball set, 8 in. mallets, short handles, painted and striped, \$5.00.

No. 2X. Professional eight-ball set, 8 in. mallets, short handles, selected, polished, three-stripe balls, \$6.00.

No. 40. Six-ball set, painted and varnished, small size balls and mallets, made especially for a children's set, \$1.75.



The Westfield Lawn Swing

This swing easily takes precedence over all others in the market. It is made of hard wood, well finished, and so constructed that it may be readily folded together when put away for the winter. Any child can operate it with perfect ease and safety.

Made in two sizes, two passenger and four passenger.

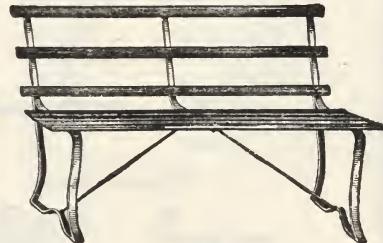
Prices Quoted on Application

Lite Wate Settee

Here is a settee, low in price, but having the qualities of a high-priced bench. It has all channel steel legs and braces, rustless bolts and nuts, and oak slats. The frame is green and the slats natural color.

Price, \$3.00

By mail in 1st or 2d zone, \$3.35



Tomato and Plant Supports

Designed especially to protect tomatoes, peonies, and small shrubs and tall growing plants

THE BARTLETT

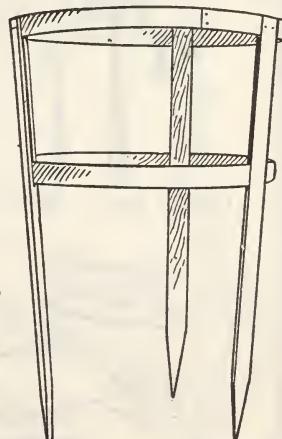
MADE FROM HARD WOOD, WITH WIRE HOOPS
Price, 35 cents each; \$3.25 per dozen

THE BRYANT

MADE OF HARD WOOD STANDARDS AND
WOOD HOOPS
Price, 20 cents each; \$1.75 per dozen

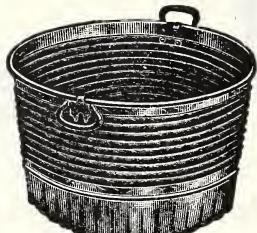


Bartlett



Bryant

Quality Hand Tools and Sundries



Galvanized Iron Basket



Turf Edger



4 Tined Hay Fork



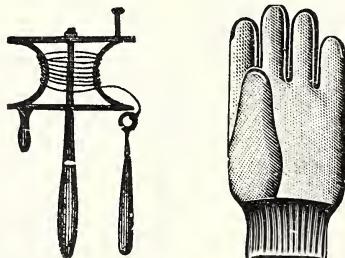
Spading Fork



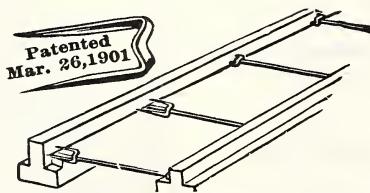
3 Tined Hay Fork



Manure Fork



Garden Line Reel



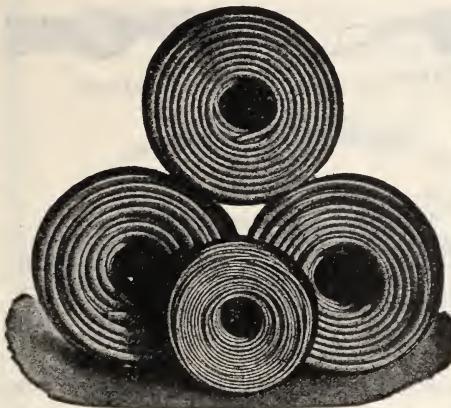
Glazing Point



Asparagus Knife

Asparagus Knives	\$.40; by mail, \$.50
Axes	
Single Bit,	1.60 "
Double Bit,	2.00 "
Axle Grease	
Mica:	
1 lb.,	.20 "
3 lbs.,	.50 "
Snowflake:	
1 qt.,	.50 "
Ball, Ox	
Brass, each,	.10 to .25; by mail, .13 to .28
Bars, Crow	
Solid cast steel, lb.,	.12
Baskets. See page 67	
Border Shears	
9-in., with wheel,	\$ 5.00; by mail, \$ 5.15
9-in., no wheel,	4.75 " " 4.90
Bouquet Holders	
Iron, tulip shaped:	
Small,	.45 "
Medium,	.55 "
Large,	.70 "
Tin,	.15 "
Brackets	
Flower Pot, one and two pot,	\$.45 \$.55
	By mail, .53 .63
Brooms	
House and Stable,	.75 1.45
	By mail, add .10
Brushes	
Bottle, each:	
No. 61,	\$.45; by mail, \$.52
No. 86,	.70 " " .77
Dust, ea.: No. 2, \$.60; No. 3, \$.65; No. 4, \$.70	
	By mail, add .08
Floor, each,	\$ 1.40 to \$ 4.25
	By mail, add .12
Scrub, each:	
1	No. 0, \$.20; No. 1, \$.25; No. 3, \$.30
	By mail, add .08
Stove, each:	No. 31, \$.35; No. 41, \$.45
	By mail, add .08
Window, each:	No. 50, \$.65; No. 5, \$ 1.10
Wire Caterpillar,	\$.50; by mail, \$.58
Bull Rings	
Copper:	
2 in.,	.35 " " .40
3 in.,	.40 " " .45
Edging Knives	
D handle,	1.25
Long straight handle,	1.20
Files	
Round, Slim Taper and Mill	
Forks	
Hay Forks, 3 tine, 13-in., 14-in., 15-in. tine,	\$ 1.30, \$ 1.70
Manure Forks, 4 tine, 5 tine, 6 tine,	
Spading Forks, 4 tine,	\$ 1.50 1.65
Fruit Pickers	
Wire, without pole,	\$.60; by mail, \$.70
Garden Lines, 50 ft.,	.60 " " .68

QUALITY HAND TOOLS AND SUNDRIES--Continued



Garden Hose



Norcross Hoe



Boston Hose Nozzle

Garden Line Reels \$2.00; by mail, \$2.12
Garden Hose, in 50-ft. lengths.

Per foot, $\frac{1}{2}$ -in. $\frac{5}{8}$ -in. $\frac{3}{4}$ -in.
\$.13 \$.14 \$.15 $\frac{1}{2}$

Garden Tools

Set of Hoe, Rake and Spade,

\$1.85; by mail, \$2.00

Glazing Points, per M., .75 " " .83

Gloves

All cotton, or cotton with
leather palm, \$.20 \$.50
By mail, add 5 cents.

Grafting Chisels \$1.00; by mail, \$1.07

Grafting Wax. See page 114.

Grass Catchers \$1.10, \$4.50

Grass Hooks .50, .65

By mail, add 10 cents.

Grass Shears

Doo-Klip Shears. See page 61. \$1.50
Sheep Shear Pattern, \$.65, \$1.00

No. 017, .75
By mail, add 8 cents.

Grindstones

Mounted, No. 1, each, \$14.32

Mounted, No. 2, each, 12.15

Unmounted, 22 to 30 in. \$5.50 to \$12.90

Guards

Flower Bed: 16-in. 22-in.
Per foot, \$.11 \$.13

Handles

Axe, \$.35 to \$.60; by mail, add \$.10

Hay Fork, $3\frac{1}{4}$ ft. to 6 ft., .35 to .65 " " ".12

Hoe, .30 " " ".10

Manure Fork, .65 " " ".12

Pick, .50 " " ".12

Rake, .50 " " ".10

Shovel .75 to .80 " " ".10

Hedge Shears 8-in. 9-in. 10-in.

\$2.50 \$2.65 \$2.80

by mail, 2.60 2.75 2.90

Hose Menders, \$.15; by mail, \$.18

Hose Nozzles, .85 " " ".93

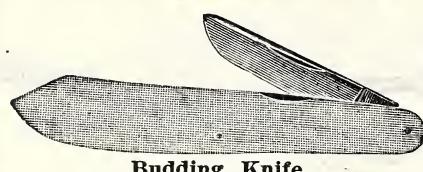
Hose Racks, \$.35

Hose Reels, Steel

No. 10, 2.50

Reeleezy, 2.00

QUALITY HAND TOOLS AND SUNDRIES--Continued



Budding Knife



Pick Mattock



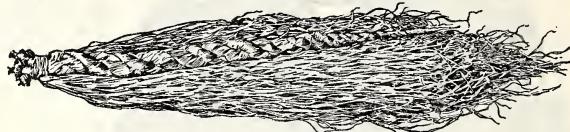
Axe Mattock



Pruning Knife



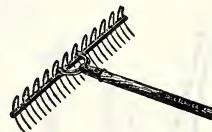
Pick



Raffia

Steel Garden Rake
Bow Shank

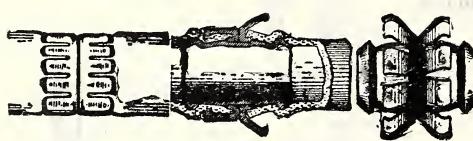
Steel Garden Rake



Wire Lawn Rake



Potato Hook



Hose Mender



Double Edge Saw



No. 16 Saw

Hoes

Field Hoe,	\$1.00	\$1.10
Norcross Hoe, 3 tooth,	.75	
Norcross Hoe, 5 tooth,	1.00	
Potato Hoe,	.90	1.40
Scuffle Hoe,		1.10
Warren Hoe,		1.30

Knives

Bread Knives (see page 63),	\$.75; by mail, \$.83	
Budding Knives,	\$1.10	1.50
By mail, 1.15	1.55	
Hay Knives,	1.75; by mail, 1.90	
Pruning Knives,	\$1.00	2.15
By mail, 1.05	2.20	

Labels, Wood Pot

Plain	Painted
4 in., per M., \$1.60	4 in., per M., \$2.00
4 1/2 in., " 1.70	4 1/2 in., " 2.10
5 in., " 1.80	5 in., " 2.20
6 in., " 2.00	6 in., " 2.50
By mail, add \$.10 per M.	

Labels, Wood Tree

3 1/2-in. copper wire,	\$2.40; by mail, \$2.50
------------------------	-------------------------

Mattocks

Axe Mattock,	1.00	"	"	1.15
Pick Mattock,	1.00	"	"	1.15

Picks

Contractor's Pick,	1.10	"	"	1.25
Railroad Pick,	1.00	"	"	1.15

Plant Stands. See page 47.

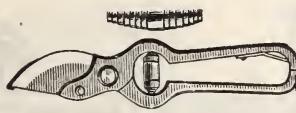
Pots. See page 47.

Powder Guns. See page 111.

Plant Tubs

Painted green:			
12-in., \$1.10	14-in., \$1.65	15-in., \$1.75.	

QUALITY HAND TOOLS AND SUNDRIES--Continued



American Shears



French Shears

Rockdale
PrunerStandard
PrunerPruner
with rope pull

Pruners

Rope Pull:			
8-ft. handle,		\$1.20	
10-ft. handle,		1.25	
12-ft. handle,		1.35	
14-ft. handle,		1.65	
16-ft. handle,		1.85	
Standard:			
8-ft. handle,		1.75	
10-ft. handle,		2.00	
12-ft. handle,		2.25	

Raffia, per lb., \$.30; by mail, \$.38

Rakes

Bamboo Lawn Rakes,		\$.50	
Steel Garden Rakes,	\$.80,	1.20	
Steel Gravel Rakes,	1.00,	1.35	
Wire Lawn Rakes,		.90	
Wood Hay Rakes,	.60,	.80	
Wood Lawn Rakes,	.90,	1.00	

Saws

Pruning Saws:

Double edge, 18-in.,	\$1.20;	by mail, \$1.30	
Double edge, 20-in.,	1.35	" "	1.45
No. 16, 14-in. adjustable			
blade,	2.00	" "	2.10
Wood Saws,	1.50	" "	1.60

Scythes 1.85 " " 2.00

Scythe Snaths 1.50

Scythe Stones \$.15 \$.25

By mail, .22 .32

Shears (for pruning)

American:

No. 10, 6-in., black,	\$.70;	nickel, \$1.25	
No. 30, 9-in.,		1.10	

By mail, add .07

Clyde (similar to Rockdale, but heavier and has draw cut):

22-in. handle,	\$2.75;	by mail, \$2.85	
24-in. handle,	3.00	" "	3.10

French:

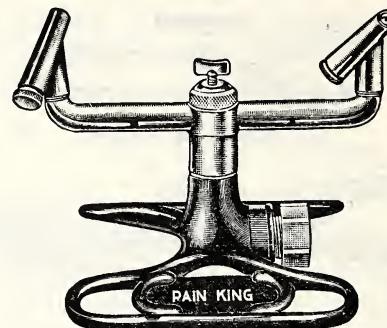
8-in.,	2.25	" "	2.32	
9-in.,	2.50	" "	2.57	
10-in.,	2.75	" "	2.83	

Portland Maine

QUALITY HAND TOOLS AND SUNDRIES--Continued



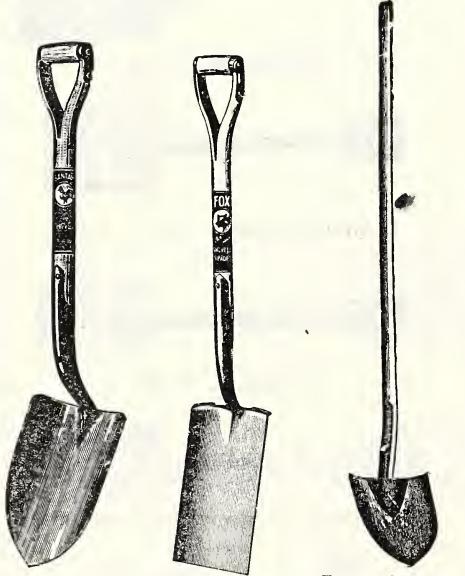
XL. No. 1 Sprinkler



Rain King Sprinkler



Wire Potato Scoop

Bantam
ShovelFox
SpadeLong Handle
Round Point
Shovel

Shears

Rockdale, wood handle:
26-in. handle, \$1.65; by mail, \$1.75
30-in. handle, 1.90 " " 2.00

Sheep Shears 1.50 " " 1.57

Shovels

D handle, square or round point, 1.40 " " 1.52
Long handle, square or round point, 1.40 " " 1.52
Maynard Socket Shovel, all styles, 2.00 " " 2.15
Fox Shovel, square or round point, 1.50 " " 1.62

Spades 1.40 " " 1.52

Sprayers

Tin or galvanized iron, .35 to .60 " " add .12

Sprayers—Compressed Air

See pages 115-117

Sprayers—Wheelbarrow

See page 129

Sprinklers

Galvanized iron:
4-qt., .75 " " .85
6-qt., .80 " " .93
8-qt., .85 " " .97
10-qt., 1.10 " " 1.22
12-qt., 1.25 " " 1.40
16-qt., 1.50 " " 1.65

Sprinklers—Lawn

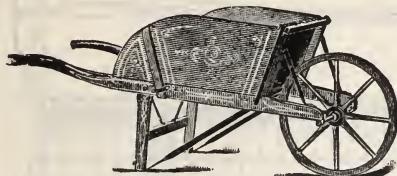
Rain King (gives a revolving or stationary spray, either fine or coarse),
Standard, 3.50 " " 3.60
Majestic, 15 in. high, 6.50 " " 6.65
XL No. 1 1.00 " " 1.10
XL No. 2 2.00 " " 2.10

Stakes. See page 51
(For supporting plants)

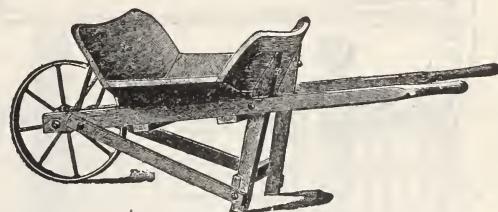
Supports—Tomato

Bartlett. See page 51
Bryant. See page 51

QUALITY HAND TOOLS AND SUNDRIES---Continued



Garden Barrow



Canal Barrow



Steel Tubular Canal Barrow



Excelsior Weeder



Magic Weeder A



Magic Weeder C



Heseltine Weeder

Post Spoon

Magic Weeder Style BB



Garden Trowel

Thermometers

Dairy,	\$.50	by mail, \$.55
Brooder,	.50	" "
Incubator,	.75	" "
House,	.50	" "
		.55

Trellises

Bow pattern. See page 47.
 Fan pattern. See page 47.
 Veranda pattern. See page 47.
 Wire. See page 58.

Trowels

No. 809, all steel, 6-in.,	\$.25	by mail, \$.30
Ladies' 6-in.,	.15	" "
Transplanting, 6-in.,	.20	" "
Solid steel, 6-in.,	.70	" "
Solid steel, 7-in.,	.75	" "
		.82

Twine

Cotton, ball,	.10	" "	.15
Hard, ball,	.45	" "	.52
Soft, ball,	.20	" "	.27
Tarred Lath Yarn, lb.,	.25	" "	.32

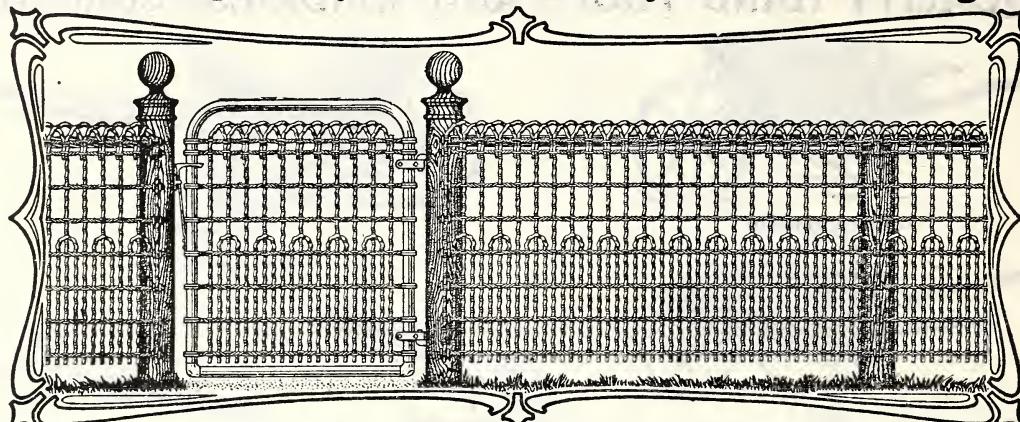
Weeders

Excelsior,	.20	" "	.25
Heseltine,	.30	" "	.35
Magic A,	.20	" "	.27
Magic C,	.30	" "	.37
Magic D,	.50	" "	.57
Magic BB, 36-in. handle	.30	" "	.38
Midget,	.50	" "	.60
Norcross, 3 tooth,	.75		
Norcross, 5 tooth,	1.00		

Wheelbarrows

Canal Barrow,	\$ 6.00
Canal Barrow, all steel,	11.00
Canal Barrow, steel tray,	10.00
Garden Barrow, large,	8.50
Garden Barrow, medium,	8.00

Waukegan-Cyclone Sanitary Wire Fencing

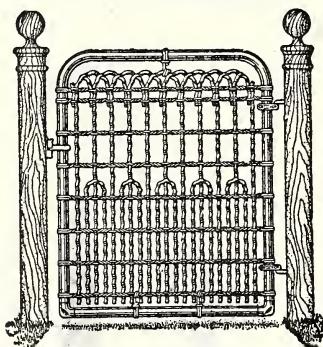


Style "F" fabric shown above on ordinary wood posts opens up the yard to fresh air and sunlight, creates healthy playgrounds out of unsanitary back yards and makes gardens, flower beds, lawns, etc., possible.

Pickets are all No. 9 heavily galvanized wire, spaced $2\frac{1}{2}$ inches apart at top, $1\frac{1}{8}$ at bottom, making fence absolutely chicken proof.

STYLE "F" FABRIC, Three Sizes, 36 inch, 17c. per ft.; 42 inch, 18c. per ft.; 48 inch, 20c. per ft.

Universal Garden Gates



These are low-priced, strong, practical and durable. Choice of 36, 42 or 48 inch heights.

3 foot opening.

Write for prices on Garden Gates.
Also on 8, 10, 12, 14 and 16 foot Farm Gates.

Cyclone Single Trellis

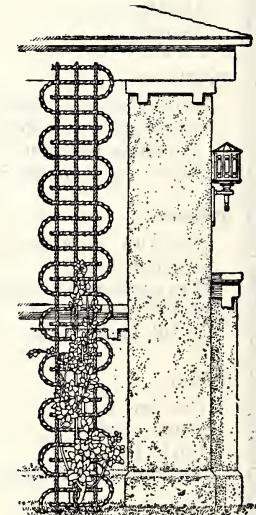
The most practical trellis made for climbing vines and flowers.

Easily placed in position. Cut to any length. Can be used for years, making an extra, low-priced trellis that adds to the beauty of porch and home.

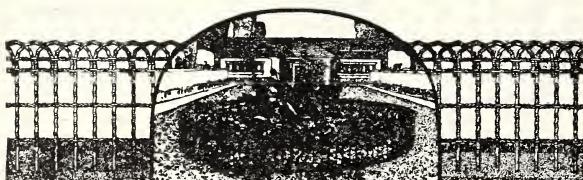
18 inches in width.

14c. per ft.

By mail, 17c. per ft.



Perfection Flower Guard



Affords ample protection against dogs, cats, chickens, etc., besides keeping children from running over flower beds. Fits any shape or size of flower bed. No posts necessary. Picket ends are left straight for inserting in the ground. Pickets No. 9, cables No. 13 heavily galvanized wire.

Two sizes, 16 inches high, 11c. per ft.; by mail 14c.; 22 inches high, 13c. per ft.; by mail, 16c.

Steel Fence Posts

LINE POSTS

END POSTS

CORNER POSTS

These posts are easier to set, neater looking, and cannot be destroyed by grass or brush fires.

Write for Prices

PRICE CHANGES

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Pennsylvania Quality Lawn Mowers

Buy a Lawn Mower Once; Not One Every Year

Your first purchase can be your last, if you choose the mower that lasts. "Pennsylvania" Quality Lawn Mowers are made to give the longest and most efficient service, even under the hardest usage and the most extraordinary working conditions.

Most professional gardeners choose "Pennsylvania" Quality Mowers because they run easiest, cut cleanest, last longer and require the least care and attention during their long life.

Their economy in comparison to ordinary mowers is striking. Just divide the first cost of a

"Pennsylvania" Quality Mower over the long years of work, and compare it to the cost of any other mower covering the short period of two or three years' possible use, to say nothing of the frequent sharpening and repair bills of the ordinary mower.

Self-Sharpening — A feature exclusive to "Pennsylvania" Quality Mowers is the self-sharpening, crucible tool steel blades. All the revolving blades, as well as the stationary blades, are of same steel as is used for finest tools requiring keenest cutting edges.

Great American Ball Bearing

This machine is one of the most popular of the "Pennsylvania" line and consequently is more imitated than any other lawn mower manufactured. **Raised edge, self-sharpening lower knife, highest grade ball bearings, smooth running, are special features.**

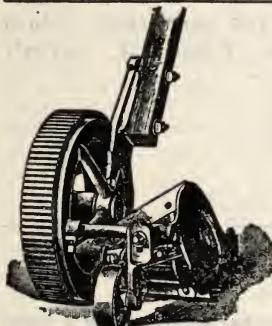
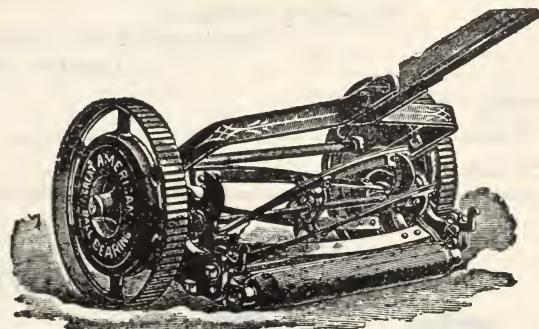
10-inch driving wheels. 5 blades.

Sizes	Prices
15-inch	\$18.75
17-inch	21.00
19-inch	23.50
21-inch	25.75

SUPER GREAT AMERICAN

Ball Bearing and Roller Bearing

17-inch	\$22.50
---------	---------



Pennsylvania B. B. Under Cut Trimmer

This machine is the only one to successfully replace the use of hand shears. The slanting side plate and conical cylinder make it possible to cut all the grass left by the regular style of lawn mower. The unique construction of the **Under Cut Trimmer** permits cutting, not only close up to a wall, fence, trees, etc., but it will get the grass under a fence or rock-cut base of tombstones, house foundations, and other places hitherto out of reach of anything but hand shears. For cemeteries it has the special advantages of not marking or smudging the stones, as the side plate does not come in contact with the stone above the grass line.

Price, \$12.00

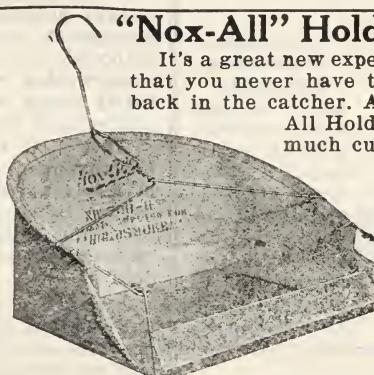
William Penn

10-inch Wheel, 5 Blades

One size only.

16-inch \$15.00

The latest of the Pennsylvania Quality Lawn Mowers, designed to meet the demand for a five-blade mower less expensive than Great American.



"Nox-All" Holdsmore Grass Catcher

It's a great new experience to tackle a lawn and know that you never have to stoop and push the cut grass back in the catcher. Actual tests prove that the Nox-

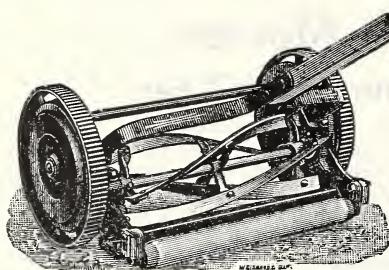
All Holdsmore holds more than twice as much cut grass as the ordinary type of catcher. Will fit any mower made. Instantly attached and detached. Canvas body, galvanized iron bottom, combining strength with lightness.

Price

No. 1, for 12, 14 and 16-inch mowers \$1.25

No. 2, for 16, 18 and 20-inch mowers 1.35

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



Kutzit Ball Bearing Lawn Mower

The Combined Points Are Price, Simplicity, Durability, Utility

From our experience with the Kutzit Mower we do not believe that there is a better low-priced mower on the market.

Width of Cut	Wheels	No. of Blades	Net Price
14-inch	8-inch	4	\$7.50
16-inch	8-inch	4	8.00
18-inch	8-inch	4	8.25

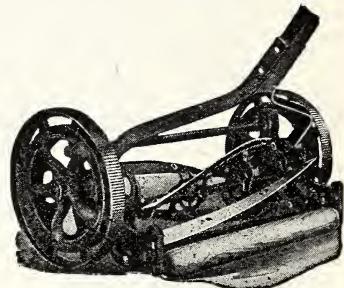
Speedy Lawn Mower

9-inch wheels, with raised rim

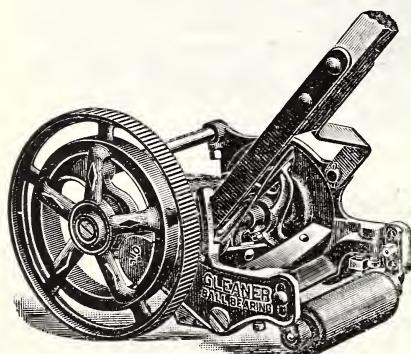
Four-blade cutting reel

Dust-proof ball bearings

Durable and easy running



Width of Cut	Net Price
16-inch	\$10.50
18-inch	11.00



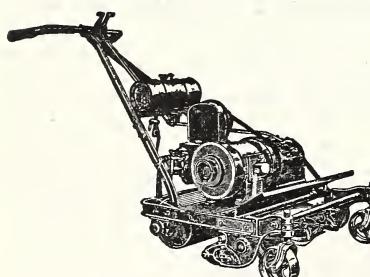
Townsend's "Gleaner" Trimmer

Does what lawn mowers leave undone. Trims and edges the lawn with remarkable speed and perfection. 9-inch wheel, ball-bearing; 4 steel blades, 8-inch cut. Strictly high grade in every particular.

Price, \$10.00

Coldwell Cub

Motor Lawn Mower
and Roller



Economical
Dependable
Reasonable
Light weight,
substantially
built, easily
handled. Free
from trouble
and delays.
Special de-
signed motor.
Abundance of
power. Cuts
close to trees,
etc. Mows and rolls simultaneously. Timken
Tapered Roller Bearings.

Light weight,
substantially
built, easily
handled. Free
from trouble
and delays.
Special de-
signed motor.
Abundance of
power. Cuts
close to trees,
etc. Mows and rolls simultaneously. Timken
Tapered Roller Bearings.

Recognizing the increasing demand for a light weight, substantially built power lawn mower at a moderate price, Coldwell Lawn Mower Co. has embodied in the CUB features of design and construction representing the accumulation of thirty years of experience in the manufacture and sale of power lawn mowers.

The CUB is a light, strong, easily handled power mower, so simple that an inexperienced man can understand and operate it. Automatic engine lubrication and the elimination of parts requiring adjustment by the operator, insure dependable performance free from trouble and delays.

A four cycle motor, water-cooled with radiator and fan was designed especially for the CUB and provides an abundance of reserve power for cutting on steep grades and in rank or tough grass.

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

American Timken Lawn Mower

A REMARKABLE ACHIEVEMENT IN LAWN MOWER CONSTRUCTION.

Cutting Reel, 6 inches in diameter, revolves on automatic adjusting Timken Roller Bearings.

Five oil-tempered, crucible steel, self-sharpening cutting knives.

Ten-inch reinforced open drive wheels, running on Hyatt Roller Bearings.

Spring cup oilers; positive acting, wearproof pinions. All bearings are roller bearings.

This mower is one of the finest Lawn Mowers made. The Timken Tapered Roller Bearings, automatically controlled, along with the five crucible steel cutting blades and the Hyatt Roller Bearings in the wheels, insure a smooth, clean-cut lawn with a minimum of effort.

Made in 16-inch and 18-inch widths.

Price: 16-inch, \$19.00; 18-inch, \$20.00

Lawn and Dandelion Rake



This rake is designed especially for use on lawns, being so constructed, with teeth shaped like saw teeth, that it will not tear the grass roots and will destroy dandelions by cutting off the blossoms before the seed forms. Width of head, 16 inches.

Price, \$1.00



Doo-Klip Grass Shear

(It's a Good One)

The arrangement of the handles in a perpendicular plane, allowing the use of the hand in a free and natural manner, is of prime importance. In using the old type of shear with handles and blades in the same or horizontal plane, the hand and wrist are strained and distorted. This new shear has greater leverage,

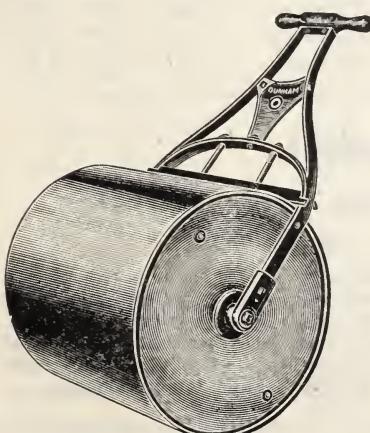
consequently more power, quicker action; the blades are mechanically held, so the grass cannot slip between without being cut, nor can the blades slip apart. These are very disagreeable features in various old styles of grass shears now on the market.

Price, \$1.50; by mail, \$1.58

Dunham Water Ballast Lawn Rollers

ALL IN ONE { A Light Machine for the Soft, Wet Spring Lawn
A Heavy Machine for the Dry, Hard Summer Lawn
A Heavier Machine for Walks, Tennis Courts } GUARANTEED

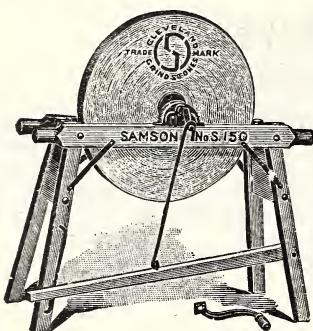
Winter frost and spring thaw heave and crack the sod. Tender grass roots are cut off from subsoil base of supplies—are exposed to death from sun and air. Only light weight roller pressure will properly reset them. Summer sun and wind quickly dry out the top soil. Perfection in shallow growing plant life then depends on the capillary action maintained only by frequent heavy weight rollings. The luxuriant stand of grass which follows intelligently applied rollings is in itself death to weeds. The roller so disturbs moles, ants and similar enemies of the lawn that they soon migrate to other fields. The rolled lawn is the smooth lawn—easy to mow. It's the soft, springy turf of deep green—the best on the street. Try the ROLLER MEDICINE—It's better, cheaper and quicker than watering.



General Description

Dunham Water Ballast Lawn Rollers have steel handles, roller bearings, acetylene welded drums with anti-turf-tearing, rounded edges. The most efficient and easiest running roller made.

Catalog No.	No. of Drums	Diameter of Drums	Width of Drums	Rolling Width	Weight Empty	Weight with Water Filled
Roller Bearing 5	1	18 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	85 lbs.	265 lbs.
Roller Bearing 7	1	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	110 lbs.	420 lbs.
Plain Bearing 4	1	18 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	23 $\frac{1}{4}$ in.	85 lbs.	265 lbs.



Grindstones

SAMSON, MOUNTED

Frame of hard wood, securely bolted together, and fitted with both treadle and crank. The stones are of fine quality, from 22 to 26 inches in diameter.

The Harvest King Power Grindstone

For Farm Use

The frame is of heavy angle steel, $1\frac{1}{4}$ " x $1\frac{1}{4}$ " x 3-16", strongly braced, is equipped regularly with our standard high grade selected Cleveland grindstone, 24" x 2", a $\frac{5}{8}$ " shaft, 12" x $2\frac{3}{8}$ " pulley and heavy roller bearings, hand crank and drip cup.

Weight, with regular equipment, about 125 lbs.

We also carry a line of

Unmounted Stones

from 18 to 30 inches in diameter
also

SCYTHE STONES OF VARIOUS KINDS AND GRINDSTONE FIXTURES

Write for Prices

The "BURN-ALL" Incinerator

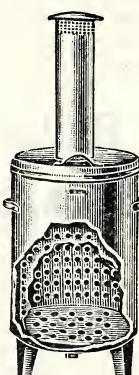
Endorsed by Health and Fire Authorities

For quick and safe disposal of rubbish, refuse and garbage for all home owners, private institutions, country clubs, schools, farm houses, camps, resorts, parks, industrial plants, stores, estates, etc.

What it does:

Reduces rubbish, refuse, all garbage, trash, leaves, etc., to a handful of clean, sterilized ashes, which make a very superior flower bed fertilizer.

There is no odor at all worth mentioning, whether burning the garbage or waiting to fill up for burning. There is a constant circulation of air which dries the contents, from the moment the refuse is dumped in the incinerator. This circulation positively eliminates decomposition within incinerator such as occurs in the ordinary garbage cans.



The "Burn-All" will burn all your refuse and is the last word in sanitary garbage disposal.

COMPLETE SPECIFICATIONS

Model Nos.:	No. 1A	No. 4	No. 8
Capacity—Bushels:	$2\frac{1}{4}$	$4\frac{1}{2}$	$8\frac{3}{8}$
Diameter of Body	19"	24"	33"
Height of Body	26"	30"	30"
Height of Legs	6"	6"	7"
Length of Pipe	23"	26"	26"
Diameter of Pipe	5"	6"	6"
Height Over All	4' 7"	5' 2"	5' 3"

Cyclone Catch-all Basket

The Ideal Rubbish Burner for Homes, Schools, Parks, Tourist Camps, etc.

Fill them up—burn them out. The raised bottom permits draft: the close mesh keeps burning fragments safely confined—no fire hazard.

Cyclone Burner-Baskets are endorsed for their safety by City fire authorities everywhere.

Specifications:

Height, 29 inches. Width at top, 20 inches. Width at bottom, 16 inches. Weight, including cover, $14\frac{1}{2}$ lbs. each. Size of wire used, No. 10 gauge. Size of mesh, $1\frac{1}{2}$ inch. Welded at every fourth intersection; 198 welds. Very rigid construction. Finish, Baked Green Enamel.

Price, \$3.00

BURNS BREAD KNIFE



Makes a clean cut without tearing or making crumbs.

Price: 75c; by mail, 85c

Star Can Opener

Opens Cans Safely

Eliminates Injury

No Danger of Cut Hands

The Star Can Opener enables you to open square, oval, oblong and odd shaped cans with perfect ease, without touching can with hands, without punching hole in can, without leaving jagged edges.

Price: 50 cents; by mail, 55 cents

OUR GUARANTEE — Money refunded if not satisfactory.

Sure-Grip Glue

THE GLUE WITH A GRIP

It grips wood like iron, without the aid of clamps or tying. It sets quickly, and it is a positive fact that clamps are needed only to bring the several parts together: Sure-Grip will hold them there. Sure-Grip Glue is not affected by atmospheric conditions or dry heat, and will not crystallize as most glues do.

Any furniture or wood work glued with Sure-Grip, according to directions, will stay glued and will not become loose or wobbly.

Price: 25 cents a can; by mail, 30 cents

Hercules Cold Soder

"THE METAL MENDER"

A Semi-Liquid in Handy Tubes for Easy Mending. Simple, Economical to Use.

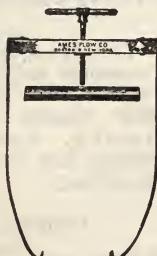
Hercules Cold Soder will mend any leak, hole or crack in metal without heat or acid. It is not a welder, however, and will not hold two separate pieces of metal together.

Hercules Cold Soder is guaranteed to mend holes, cracks in aluminum, granite ware, tin, galvanized ware, brass, iron, lead, gas, steam and water pipes. Makes any pipe joint tight. Stops leaks or cracks in auto cylinders, gas tanks, etc.

Price: 25 cents the tube; by mail, 30 cents

Barrel Header

This is the most simple labor-saving machine ever invented for heading up barrels, and is used extensively for heading up apples, fish and other merchandise.



PRICE
(1-inch screw) \$4.25

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Barrel Liners

and

Pulp Heads

For Apple Barrels

WRITE FOR PRICES

Hay Ties

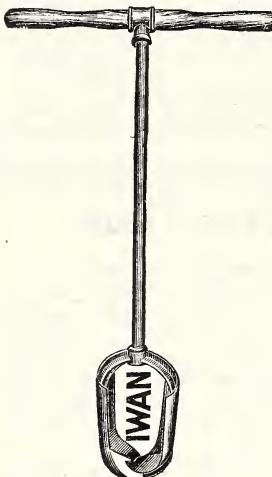
No. 15 Cross Head

6, 6½, 7, 7½, 8, 8½, 9, 9½

WRITE FOR PRICES

Iwan Post Auger

WHY YOU SHOULD BUY AN IWAN



Large cutting surface. Great durability.

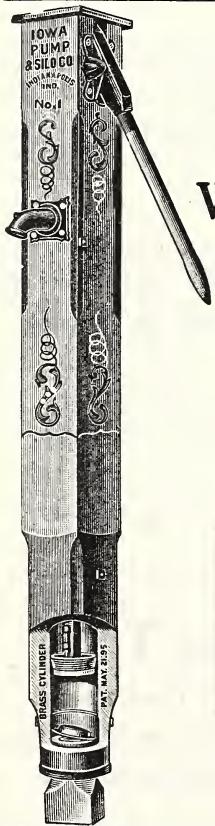
Light pressure needed. Works satisfactorily on wet or dry ground.
Easily emptied.

PRICE

4-inch	\$2.25
6-inch	2.25
8-inch	2.50

Well Buckets

Made from Oak, Heavily Hooped
Also Light and Heavy
Weight Buckets made
from Galvanized Iron.

**Wood Pumps**

(With Porcelain or
Brass Lining)

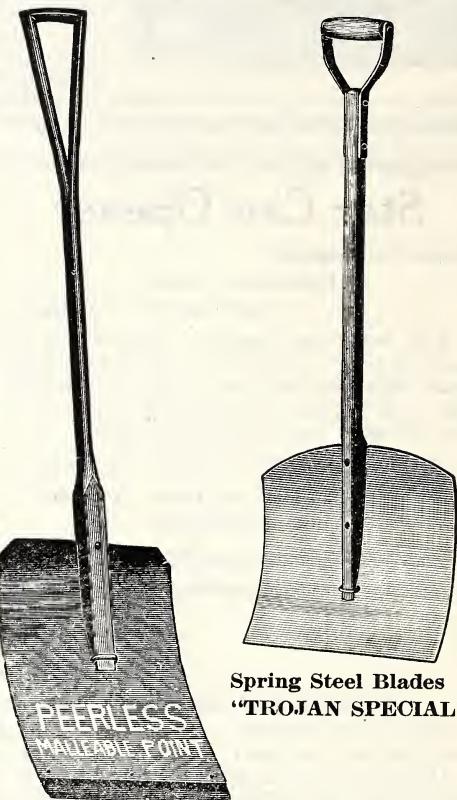
PUMP CURBS**PUMP FIXTURES****TUBING****CHAIN AND
RUBBER
BUCKETS****SANITITE
KEGS**

Made of Fir
PRICE

5 gals.	\$1.50
10 "	2.25
15 "	2.65
20 "	3.15
25 "	3.50
30 "	4.00
50 "	5.50

Snow Shovels

WOODEN AND STEEL



Spring Steel Blades
"TROJAN SPECIAL"

WOOD

7 x 10.....	\$.25	11 x 14.....	\$.50
9 x 12.....	.45	14 x 18.....	.85

STEEL

D handle	\$.65
Long straight handle .....	.60
Trojan, spring steel blade, 16 x 18 ..	1.15

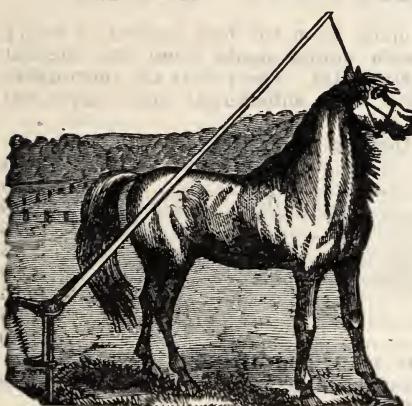
**THE DEERING
Snow Scoops**

For Railroad
Crossings and Platforms,
Ice Ponds, Mill Yards,
Flat Roofs, Concrete
Walks, and General
Shoveling.

PRICE

2 feet,	\$ 6.75
2 feet, 6 inches, 7.75	
2 feet, 9 inches, 8.25	

Animal Tether



Price, \$5.00

Hay Knife



Price, \$1.75

By mail, \$1.90

Iron Corner

Feed Racks
and Mangers

Corner Manger



Feed Rack

Write for Prices

WHEN YOU THINK OF GLAZING THINK OF

Puttium

At Last—A Glazing Cement You Can Buy with Confidence

A Scientific Formula—You will find no tar in Puttium. Its basic ingredients are the purest Mexican asphalt combined with just the proper proportion of Gilsonite and high quality Canadian asbestos fibre. Its formula embodies the use of only high-grade materials and scientific mixing, giving to PUTTIUM the elasticity so vitally essential.

Puttium expands and contracts with all extremes of temperature and weather. It will not run in summer or freeze in winter. It will not crack, peel or break. Never becoming brittle, it is easy to remove with a putty knife when necessary.

Gray Puttium—By eliminating the asphalt base of Black Puttium and using instead specially-treated non-volatile oils, heat-resisting gums and high-grade imported pigments, the demand for gray glazing cement has been met with Gray Puttium. Containing in addition the correct amount of asbestos fibre, this superior gray cement is ideally suited to all kinds of glazing work and is especially recommended for bedding glass.

PUTTIUM, in black or gray, is sold in steel drums and cans of various capacities. A gallon will glaze from 350 to 400 running feet of sash bar.

PRICE LIST (Per Gallon)

BLACK PUTTIUM

Bbl., 60 gals.	\$1.25
Bbl., 38 gals.	1.25
Can, 20 gals.	1.35
Can, 10 gals.	1.40
Can, 5 gals.	1.50
Can, 1 gal.	1.60

GRAY PUTTIUM

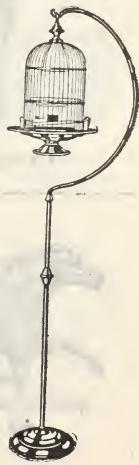
Bbl., 60 gals.	\$2.05
Bbl., 38 gals.	2.05
Can, 20 gals.	2.15
Can, 10 gals.	2.20
Can, 5 gals.	2.30
Can, 1 gal.	2.50



Bird Seeds and Supplies



French's Bird Biscuit	.....	\$ .12	Pkg.	Bird Manna	.....	\$ .15	Pkg.
" Mixed Bird Seed	.....	.20	"	Sicily Canary Seed	.....	.20	Lb.
" Exercise Ball	.....	.15	"	Cuttle Fish Bone	.....	.05	Each
" Coloring Pepper	.....	.25	"	Hemp Seed	.....	.20	Lb.
" Canary Tint	.....	.25	"	Sunflower Seed	.....	.15	"
" Mite Powder	.....	.25	"	Millet Seed	.....	.10	"
" Nestling Food	.....	.25	"	Maw Seed	.....	.20	"
" Song Restorer	.....	.20	"	Unhulled Rice	.....	.20	"
" Bird Tonic	.....	.25	"	Rape Seed	.....	.20	"
Bird Baths, oval	.....	.25	Each	Bird Gravel	.....	.10	Pkg.
Bird Bath Houses	.....	.85		Fish Food	.....	.15	"
Cuttle Fish Holders	.....	.10		Cage Guard, 3 in.	.....	.35	ft.
Cage Cups	.....	.15 to .20	"	Cage Hooks	.....	.20 to \$1.25	Each
Cage Springs	.....	.15	"	Ladderchain with Spring	.....	.25	"



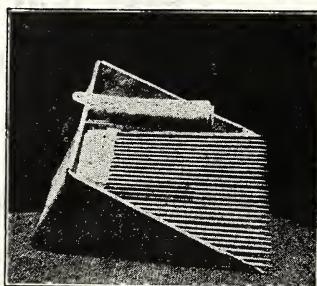
BIRD CAGES AND STANDS

Round and square brass Canary Cages.

Round and square Parrot Cages, Breeding Cages.

Round Cages in Various Colors with or without Stands.

Blueberry Picker



This picker is made from the best quality of heavy tin, and fitted with points made from the highest tempered steel spring wire. The points are thoroughly soldered, making a very substantial and convenient picker.

Made in the following sizes:

18 point	.....	\$2.35
20 "	.....	2.50
24 "	.....	2.65
26 "	.....	2.75
28 "	.....	2.85
30 "	.....	3.10
32 "	.....	3.15
34 "	.....	3.25
36 "	.....	3.50

By mail, add 10 cents

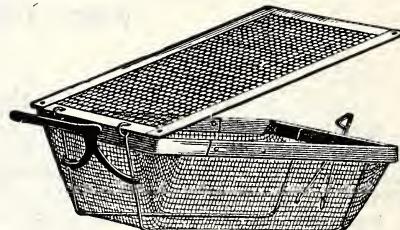
18 and 20 point have handle outside, other sizes have handle inside.

Corn Poppers

Firm and well braced popper with detachable handle, and with wire guards to protect bottom of popper from wear.

PRICE

1 quart.... 25c.; by mail 30c. || 2 quart.... 40c.; by mail 52c.
 1½ quart 30c.; " " 40c. || 4 quart.... 70c.; " " 82c.
 8 quart (factory size), \$4.25; by mail, \$4.45



POP FRIERS. A new popper with a sliding cover, wire handle and metal pan in the bottom.
 2 quart, 50c.; by mail, 60c.

Popping Corn

White Rice. Both shelled and on the cob.

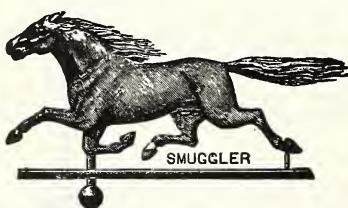
Little Buster. Something new. Pops without any hard center. Try it and convince yourself it is the best you ever ate.

Wooden Measures



In sets of 1, 2, 4, 8 and 16 quart sizes

Price per set, \$3.25



Weather Vanes

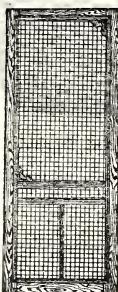
All our vanes are made of copper and gilded with 23-carat gold leaf that will remain bright for years. The vanes include iron spire with steel spindle, points of the compass and gilded balls and letters.

Descriptive Circular and Price List on application

High-Grade Screen Doors and Window Screens

OUR SCREEN DOORS are square mortised and tenoned joints throughout, making the strongest and best construction possible.

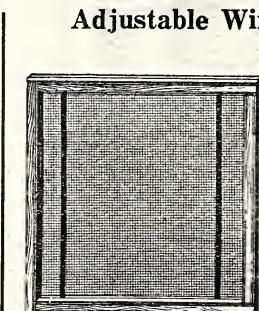
The wire cloth is placed on the screen door by special machinery, which stretches the cloth drum-head tight. The wire cloth is pressed into a groove in the wood and covered with a flush beaded moulding, mitered at corners, which prevents the cloth from becoming loose and baggy.



No. 314

SIZES

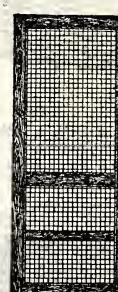
2 ft., 6 in. x 6 ft., 6 in.	No. 1533	High 15 in.	Closed 21 in.	SIZES
2 ft., 8 in. x 6 ft., 8 in.	1833	18 in.	21 in.	Opened 33 in.
2 ft., 10 in. x 6 ft., 10 in.	2433	24 in.	21 in.	33 in.
3 ft., x 7 ft.	2437	24 in.	23 in.	37 in.



Adjustable Window Screens

The "Continental"

is guaranteed to have perfect adjustment. Wire cloth is securely fastened to frame and covered with moulding. Material used is best hard wood, finished in oil, both sides alike.

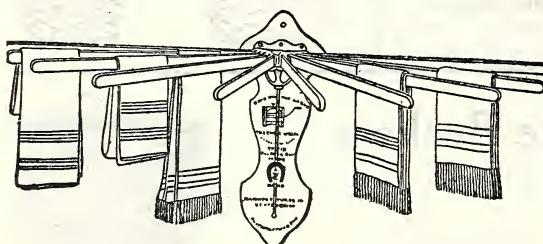


No. 241

SIZES

2 ft., 6 in. x 6 ft., 6 in.	No. 1533	High 15 in.	Closed 21 in.	SIZES
2 ft., 8 in. x 6 ft., 8 in.	1833	18 in.	21 in.	Opened 33 in.
2 ft., 10 in. x 6 ft., 10 in.	2433	24 in.	21 in.	33 in.
3 ft., x 7 ft.	2437	24 in.	23 in.	37 in.

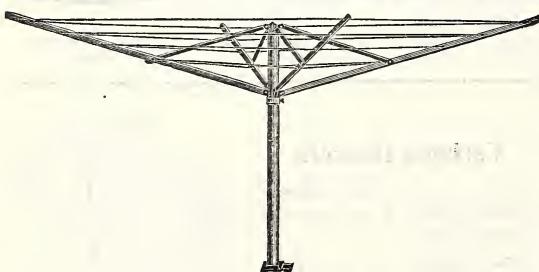
EMPIRE FOLDING WALL DRYERS



Price: \$1.00; by mail, \$1.12

ADVANCE CLOTHES DRYERS

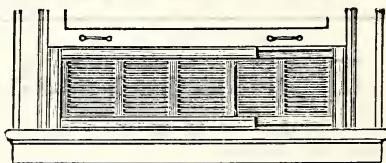
The Best Clothes Dryers in Use



No. 1. 120 ft. line, \$8.50 No. 2. 160 ft. line, \$9.25

Balcony Dryers \$15.00

"Deflektair" METAL CENTER



WINDOW VENTILATOR

Rain or snow outside—Fresh air inside without draft. Protects curtains and draperies from moisture, dust and soot. Allows perfect privacy with windows open. Adjustable to any window. Strongly constructed.

Made in the following sizes:

No. 87—8 inches high, adjustable 21 to 37 inches wide, 35c; by mail, 45c.

No. 117—11 inches high, adjustable 21 to 37 inches wide, 55c; by mail, 65c.

CONTINENTAL SANITARY WINDOW VENTILATORS

A specially treated cotton fabric of fine mesh. Keeps out all drafts, dust, rain and snow, but permits a constant circulation of fresh air. The frame is of hard wood, adjustable to fit any ordinary window opening.

No.	Price	Mail
937. 9 in. high, extends 23 to 37 in. wide,	\$.35	\$.45
949. 9 in. high, extends 29 to 49 in. wide,	.45	.55
1537. 15 in. high, extends 23 to 37 in. wide,	.45	.55
1539. 15 in. high, extends 29 to 49 in. wide,	.60	.70

"K. & W." Sanitary Sweeping Compound

Can be used on carpets, rugs, linoleums, mattings, tile and wood floors; is economical, non-inflammable, and absorbs the dust, thereby preventing the scattering of disease germs.

This powder is mixed by machinery only, and is composed of a special wood pulp combined with absorber and silica, which gives it its cleansing property. There is no sand used, the grit which is noticeable being silica. The oil of cedar, which is used as a disinfectant, is one of the best known to medical science. This powder always runs uniform, will cover a large area, and its use is recommended in every home, public building, store and factory.

PRICE

50 pound keg	\$2.25
100 pound keg.....	3.75
Special quotations on large quantities	

**O'Cedar Polish and Dustless Mop**

The one perfect polish for pianos, automobiles, furniture, hard wood floors, and all waxed, varnished and polished surfaces, as it will not gum, and aside from its high lustre it is a dust allayer, a labor saver, and clean and sanitary in every particular.

PRICE	4 oz. bottle	\$.30; by mail, \$.35
O'CEDAR	12 oz. bottle .....	.60; " " .67
	Quart can	1.25; " " 1.35
	Half gallon can	2.00; " " 2.15
	One gallon can	3.00; " " 3.15

Price O'Cedar Mops, No. 3 (triangular), \$1.50; by mail, \$1.60; No. 4 (triangular), \$1.00; by mail, \$1.10; No. 17, 50c.; by mail, 60c.; No. 10, \$1.50; by mail, \$1.60.

**Brooms, Brushes and Dusters
and a Large Variety of Wooden Ware of All Kinds****20TH CENTURY****Barrel Pump**

FOR VINEGAR



Made from chemicalized wood and is strictly non-corrodible; does away with the slow, leaky faucet; will pump the liquid at the slightest stroke of the piston.

Price, \$2.00

Stone Ware**ALL SIZES OF**

Stone Pork Barrels, Butter Pots,
Bean Pots, Preserve Jars
Jugs and Churns

**Bean Pot****BEAN POTS**

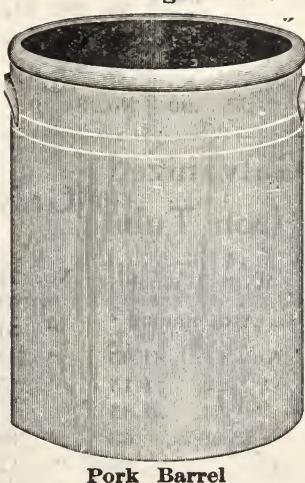
1 quart, \$.35	4 quart, \$.50
2 " .40	6 " .65
3 " .45	8 " .80

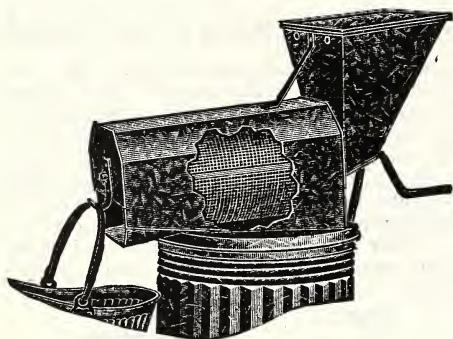
BUTTER POTS WITH COVERS

1 gallon, \$.40	4 gallon, \$1.10
2 " .60	5 " 1.40
3 " .90	6 " 1.60

PORK BARRELS, NO COVER

8 gallon, \$2.25	25 gallon, \$7.25
10 " 2.50	30 " 8.50
12 " 3.00	35 " 17.00
15 " 4.00	40 " 20.00
20 " 6.50	50 " 25.00

**Pork Barrel**



THE NATIONAL

The National Rotary Ash Sifter

In galvanized iron case. No dust. Works easily, quickly and well. Not only saves labor, but produces safety from fires.

Will fit 18-inch iron can or flour barrel.

Price, \$3.25

The Favorite Ash Sifter

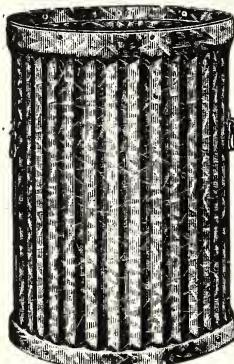
Wooden rim, with heavy wire bottom.

Price, 65 cents

The "Lowell" Ash Sifter

This is an all wire sifter, sifting the ashes through the sides as well as the bottom.

Price, 90 cents

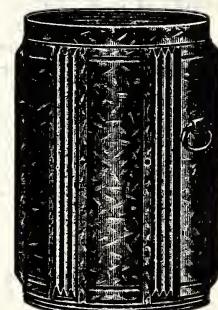


No. 0400

Galvanized Iron Ash Barrels

Solid, heavy barrels. No danger from hot ashes.

Price, No. 0400, 17 x 26,	\$2.50
" 0500, 18 x 26,	2.75
" 0190, 18 x 26, ribbed,	3.50
" 190, 18 x 26, extra heavy ribbed,	5.00



No. 190



Galvanized Iron Pails

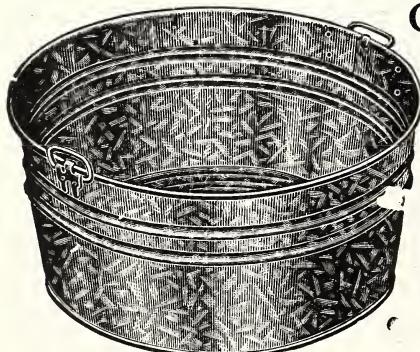
10 quart,	\$.40
12 "	.45
14 "	.50
16 "	.55
10 " extra heavy,	.70
12 " " "	.75
14 " " "	.80
16 " " "	.90

Garbage Pails

MADE FROM

GALVANIZED IRON

No. 30, 3 1/4 gal.,	\$.75
No. 32, 6 1/2 "	1.10
No. 33, 8 1/2 "	1.35
No. 34, 9 "	1.50



Galvanized Iron Tubs

With Wringer	\$.50
Attachment	.55
No. 11, \$1.05	.60
" 22, 1.15	.70
" 33, 1.35	.85
A Keelers, .65	.90
B " .70	.95
O " .85	1.15

Galvanized Iron Coal Hods



Richmond "High Speed" Washer

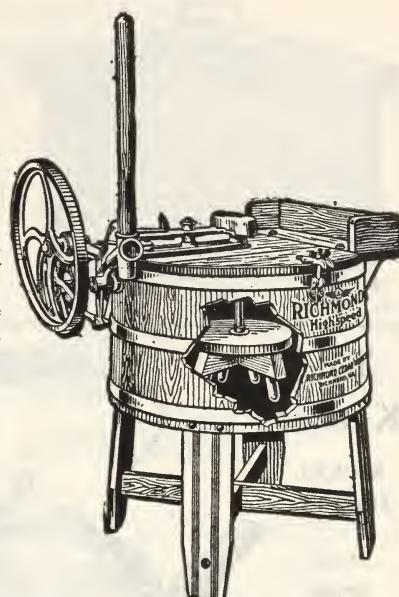
The tub is made of selected Virginia white cedar, the best wood known to man for resisting the action of water. Will not rot or become water-soaked, and will outlast several pine tubs such as are regularly used on other washing machines.

The hoops are heavy galvanized hoops, so strong they cannot break, and the tub being larger at the bottom they cannot fall off.

The dolly, with its smooth pins, turning back and forth, surges the clothes through the hot, soapy water against the corrugated sides and bottom of the tub, removing every particle of dirt.

The roller bearings and the large fly wheel make the High Speed so easy to turn that a ten-year-old child can run it and do a large washing in a short space of time.

Price, \$18.00



HIGH SPEED

Majestic Rotary Washer

This is made of the same high grade materials as the above, and very similar in construction, but being turned direct by a handle on the fly wheel it does not work at so high a speed, although doing equally good work.

Price, \$14.00

Clothes Wringers

UNIVERSAL

Made either with regular bearings, ball bearings, or with enclosed gears.

TUB WRINGERS

Universal

Rival

Superior

Daisy

BENCH WRINGERS

Universal

Rival

Write for Prices



FAMILY
SIZE
All Wood
No. 2. Maple sides and front, birch back and bottom. For rag or cloth mops. The pioneer of Mop Wringers. Low priced and a big seller.



PRICE, \$2.25
By mail, \$2.40

FAMILY
SIZE
"Can't Splash"
No. 14. Large family size for 8 to 16 oz. mops. Two piece, all galvanized 14 ga. steel.



PRICE, \$3.50
By mail, \$3.70

JANITOR'S SIZE

"Can't Splash"
No. 1. Hotel size for 16 to 24 oz. mops. Heavy galvanized steel sides and front, wood back and bottom. Enamelled black.



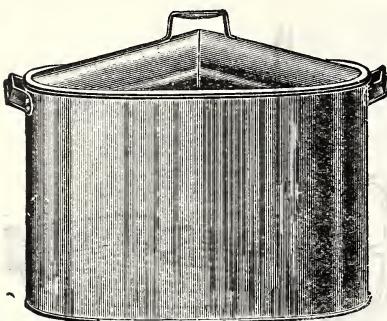
PRICE, \$3.50
By mail, \$3.70

WHITE "CAN'T SPLASH" MOP WRINGERS

Everyone responsible for keeping floors clean is a prospect for a White "Can't Splash" Mop Wringer. We all want to have clean floors, but no one enjoys wringing a dirty mop by hand. A White takes the drudgery out of mopping and makes it a pleasant task easily and quickly done.

The powerful 16 to 1 leverage converts a 25 pound pressure on the handle into a 400 pound squeeze on the mop. It wrings perfectly, easily, quickly, without lifting, twisting or turning. There is no crank or foot treadle to work and it cannot wear, tear or pull the mop apart.

It fits any pail, requires no fastening and is so simply and durably constructed that it lasts for years.



Wash Boilers

8-in. X, tin bottom,	\$1.85	9-in. X, copper bottom, \$2.50
9-in. X, tin bottom,	2.00	8-in. Rome, all copper, 4.00
8-in. X, copper bottom,	2.25	9-in. Rome, all copper, 4.25

Tea Kettles

NICKEL
COPPER

Price
\$2.00
By mail
\$2.15



Oil Cans



PRICE

5-gallon Red Band	\$1.25
5-gallon Diamond, brass faucet	1.75
5-gallon Home Rule, pump can.....	2.25
5-gallon Economy, gasoline can	1.00
1-gallon Blue Band .....	.50
By mail, .....	.60
2-gallon Blue Band .....	.65
By mail, .....	.75



“K. & W.” Oil Tanks

For use where a considerable quantity of oil is kept. These tanks are fitted with a pump, and are safe, convenient and durable.

Price, 60-gallon tank,\$12.50

Cotton Gloves

PRICE

No. 14K, 14 oz.....	25c. per pair
No. 42K, 7 1/2 oz.	20c. " "
No. 12K, 9 oz.	20c. " "
Jersey, No. 1	20c. " "
Jersey, No. 3	20c. " "
Gauntlet, leather palm, No. 18	50c. " "
Mittens, No. 320	25c. " "
Mittens, leather palm, No. 280	50c. " "

By mail add 5c. per pair

Dinner Pails



Made from good quality polished tin, complete with pie tray and cup, with seamless outside cover.

Price, \$1.10 each

By mail, \$1.25

Universal Food Chopper

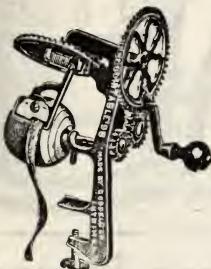


NO. 2. MEDIUM FAMILY SIZE

Chops rapidly and without mashing, and in pieces as fine or coarse as wanted, all kinds of meat, fish, fruits, eggs, bread and vegetables.

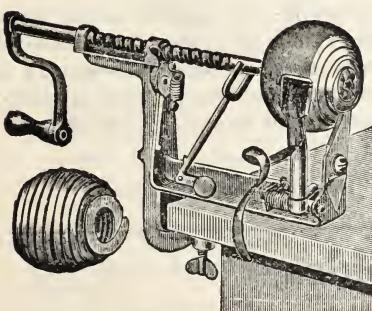
PRICE	By Mail
No. 0 (capacity 1 1/2 lbs. per min.),	\$1.85 \$2.00
No. 1 (capacity 2 lbs. per min.),	2.25 2.40
No. 2 (capacity 2 1/2 lbs. per min.),	2.75 2.90
No. 3 (capacity 3 lbs. per min.),	3.50 3.65

Apple Parers



NO. 98

Price, \$1.15; by mail, \$1.25



GENUINE WHITE MOUNTAIN
PARER, CORER AND SLICER

Price: \$1.10; by mail, \$1.25

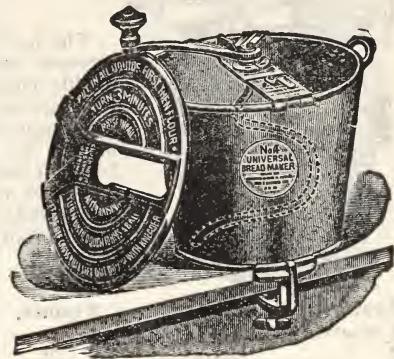
The Universal Three-Minute Bread Maker

Bread Maker, Mixer, Kneader and Raiser Combined

Made of heavy tin and sheet steel. All parts tinned. No housekeeper who has once used it will ever be content to go back to the old laborious, disagreeable way of making bread by hand. Very simple in construction. A child can operate it. As easily cleaned as a tin pail.

PRICE

No. 2 (2 loaves),	\$2.50
By mail,	2.70
No. 4 (2 to 6 loaves),	3.00
By mail,	3.25
No. 8 (4 to 10 loaves),	4.00
By mail,	4.30



Lightning Butter-Making Machine



Designed especially for the purpose of merging milk and butter, making about two pounds of table butter from one pound of butter and one pint of milk. This is accomplished easily and quickly by the peculiarly shaped metal dasher. The propeller-like motion creates a tremendous agitation, mixing the butter and milk thoroughly in about a minute. Being made entirely of metal and glass, this machine is easily and thoroughly cleaned, making it perfectly sanitary in every respect.

PRICE

No. 2 (to make 2 lbs. of butter),	\$2.00	\$2.18
No. 4 " " 6 " " "	3.00	3.20

"Pilgrim" and "Harder" Refrigerators and Ice Chests

Thoroughly constructed from hard wood and beautifully finished. Cleanable and perfectly sanitary. The economy of ice is a very important consideration, and the consumption of ice will be much smaller in our refrigerators than in many others, and at the same time insure a low and even temperature and perfect circulation of cold, dry air.



Send for
Illustrated Catalog and

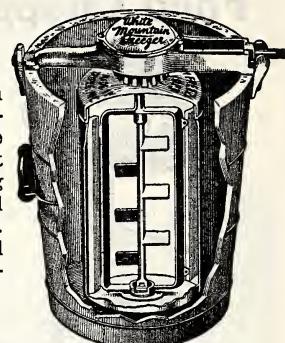
Price List

Ice Cream Freezers

"White Mountain"



The new design Triple Motion White Mountain Freezer embodies the very latest and most scientific construction in ice cream freezers. The tubs are of correct height to insure the smallest consumption of ice, and the cans of corresponding height to insure quick freezing. The special form of beater retains the famous triple motion. The new top frame construction eliminating all complicated gear mechanism makes a remarkably smooth and easily operated freezer.



PRICES

Junior,	\$2.00	3 quart,	\$4.50	8 quart,	\$ 9.00	15 quart,	\$16.00
1 quart,	3.25	4 " "	5.50	10 "	12.00	20 "	20.75
2 " "	3.75	6 "	7.00	12 "	14.35	25 "	26.65

"White Mountain"

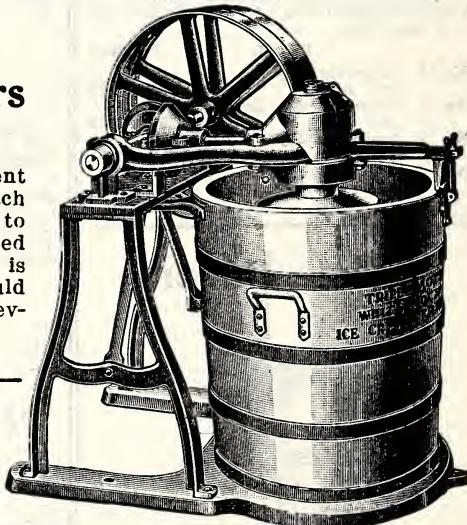
Power Freezers

PLATFORM FREEZER

Sizes, 15, 20 and 25 quarts

The platform and stand are cast iron, painted to prevent rust. When in use, the gear frame is fastened by latch bolt and thumb screw; when released it can be swung to either side, so tub and can may be removed. Equipped with either pulley or fly wheel, a good power machine is produced. The pulley is 15 $\frac{1}{4}$ x 3 $\frac{1}{4}$, and the freezer should be operated at a speed of one hundred and thirty-six revolutions per minute.

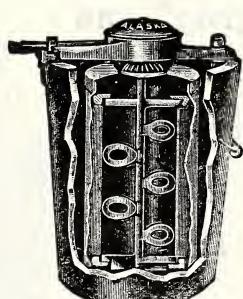
Prices on application.



"Alaska"

The only freezer having the Perpetual Motion Aerating Spoon Dasher, with its spoon-shaped floats, open in the center like mixing spoons, which aerates, stirs and beats the mixture rapidly and thoroughly.

The cut also shows the new device attached to the under part of the gear frame or cross-bar, which effectually protects the gearing and can cover from salt and ice.



PRICES

1 quart,	\$2.65	8 quart,	\$ 7.40
2 " "	3.10	10 " "	9.70
3 " "	3.70	12 " "	12.60
4 " "	4.50	15 " "	15.30
6 " "	5.70	20 " "	19.35

Sampson Freezer

Sizes, 25 and 40 quarts

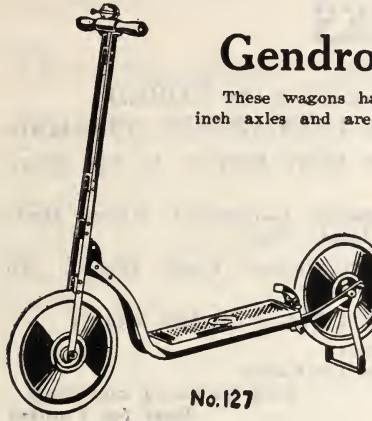
This freezer is very similar to the Platform Freezer, but is of heavier construction. The pulleys on both sizes are 24 x 4 $\frac{1}{2}$ inches and should turn about seventy-five revolutions per minute to give the correct speed.

Price on application.

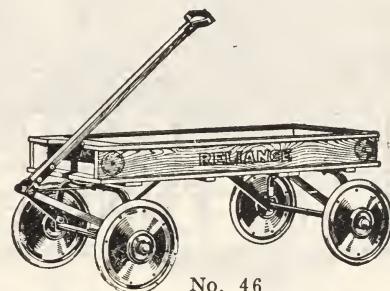
Freezer Clamp or Holder

A perfect device for holding the freezer firm and steady. Easily adjusted to the tub by means of thumb nuts. Prices: 2 to 10 quarts, 35 cents; 12 to 25 quarts, 55 cents.

An Illustrated Catalog of Power and Fly Wheel Freezers, Repairs, and Tubs and Cans for Packing Purposes furnished on application.



No. 127



No. 46

SIDEWALK CYCLES \$13.50 to \$25.50



VELOCIPEDES
\$11.25 to \$16.00

Fruit Jar Rings Good Luck



Made just right for every kind of canning—hot pack, cold pack, or steam pressure. Indispensable for steam pressure work, as they stand long boiling and any temperature.

Made 2 1/4 inch inside diameter by 10/32 flange cut 12 to the inch as approved by the U. S. Department of Agriculture. They fit all popular styles of fruit jars.

Manufactured from highest grade rubber, and attractively packed in handsome colored containers.

Per Doz., 10c. By mail, 12c.

Parowax

for covering jelly. Per lb., 15 cents.

Gendron Coaster Wagons and Scooters

These wagons have channel steel running gear, double disc wheels with rubber tires, one-half inch axles and are strongly braced.

No. 46.	Body 36 x 16 inch	\$5.00
No. 81.	Body 24 x 10 1/2 inch	2.50
No. 82.	Body 28 x 12 inch	3.00
No. 81 and No. 82 are made with wooden bolsters instead of channel steel.		
No. 112.	Scooter, 12 inch wheel, no brake	4.00
No. 127.	Scooter, 10 inch wheel, 1 in. tire, with foot brake	4.25
No. 124.	Scooter, 12 inch wheel, 1 1/4 in. tire, hand brake	6.50

Speedster	Speedway	Oxford
All with Flexible Runners		
Clipper Sleds	Frame Sleds	Sled Boxes

Men's	Ladies'	Children's
-------	---------	------------

SKIS
NORTHLAND AND OXFORD SKIS
Pine, Maple, Ash—4 Feet to 8 Feet

Fruit Jars

Genuine "Lightning"

11 ounce, pint, 1 quart and
2 quart sizes

Easy-Seal ("E-Z")

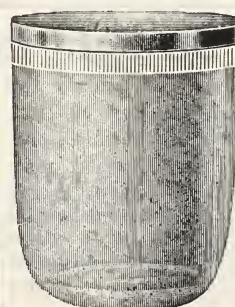
1-2 pint, pint, 1 quart and
2 quart sizes

Write for quotations

11 Genuine "Lightning"
Fruit Jars bear Trade-Mark
"Lightning."



Jelly Tumblers



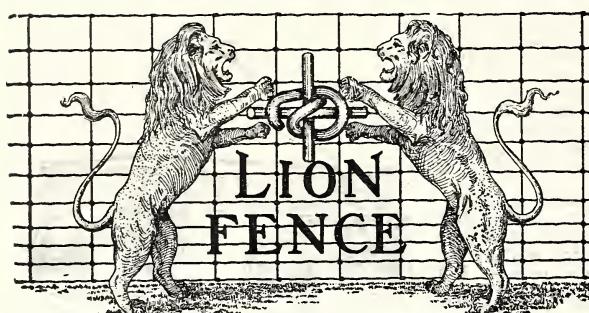
BEST
QUALITY
CLEAR
GLASS

1-3 pints, packed,
6 dozen to the case,
27 dozen to the barrel.

PAGE-LION FENCES

MADE BY

The OLDEST and BEST KNOWN FENCE COMPANY in the WORLD



A Full Line LION FENCE. All heights

Fences for Every Purpose, to suit Every Condition.

Large, Heavily Galvanized Wires, Made from Open Hearth Steel.

Straight, Continuous Cross Wires. No Wraps or Welds.

The Best Fence for the Money

Best for Horses

Best for Cattle

Best for Sheep and Hogs

Best for Poultry

POULTRY	P	1848-6	18 bars, 48 inches, 32 stays per rod.	Spaced, 1½ 1½ 1½ 1½ 2 2 2 2 2½ 3 3½ 4 4 4½ 5
	P	2058-6	20 bars, 58 inches, 32 stays per rod.	Spaced, 1½ 1½ 1½ 1½ 2 2 2 2 2½ 2½ 3 3½ 4 4 4½ 5 5 5 5 inches.

HOG	O	726-6	7 bars, 26 inches, 32 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 inches.
	O	832-6	8 bars, 32 inches, 32 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 ½ inches.

CATTLE	O	635-12	6 bars, 35 inches, 16 stays per rod.	Spaced, 6 6 7 8 8 inches.
	O	845-12	8 bars, 45 inches, 16 stays per rod.	Spaced, 4 5 6 6 7 8 8 inches.
	S	1047-6	10 bars, 47 inches, 32 stays per rod.	Spaced, 3 3 3 ½ 4 ½ 5 ½ 6 6 ½ 7 8 8 inches.

Write for quotations

Excelsior Poultry and Rabbit Fence

Similar to the Page fence, but of lighter wire. All wires are No. 19 gauge hard-drawn tough steel, standing the highest breaking strain used in any fencing. The selvages consist of double No. 19 wires.

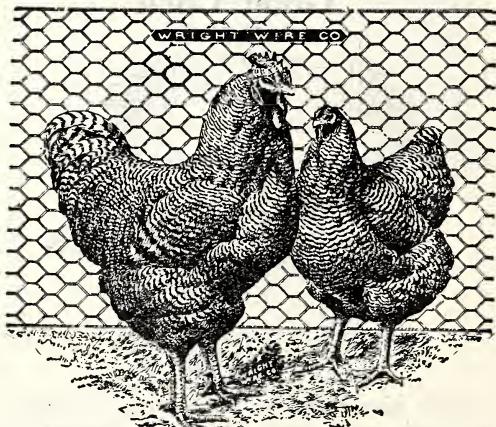
Galvanized

Hex Mesh Poultry Netting

Made from No. 20 selected steel wire, galvanized after wearing. Made in 2-inch and 1-inch mesh, and of a superior, smooth finish.

This netting is put up in rolls containing 150 running feet each and in the following heights, 1 foot, 1½ feet, 2 feet, 3 feet, 4 feet, 5 feet, 6 feet.

Write for Prices



W. S. Straight Line Poultry Fence

This type of fencing is used for exactly the same purposes as Hex Mesh Poultry Netting. As it is made with one set of wires running parallel it can be easily stretched between posts and can be used without rails or boards at top and bottom and does not sag. The horizontal wires are woven with a slight curve to allow for stretching in the process of erection and also

to meet the contraction caused by weather. Galvanized after weaving.

Standard widths 12 inches to 72 inches inclusive, and standard length rolls of 150 linear feet each, in two sizes only, 2-inch mesh and 1-inch mesh. The 2-inch mesh is made from No. 18 horizontal wires and No. 20 cross wires; the 1-inch mesh from No. 19 horizontal wires and No. 21 cross wires.

Write for Prices

The Standard Cyphers Incubator

Hot Air Incubators Made in One Style

The Standard Cyphers meets every practical demand that can be made upon it.

Remember—none of the cost of the Standard Cyphers Incubator goes to pay for ornaments, fancy hardware or unnecessary parts. It is a plain, substantial, durable machine for hatching eggs—just that and nothing more. It is chock-full of incubator efficiency and it is sold as low as that kind of an incubator can be sold.

The price you pay for an incubator is of secondary importance. The incubator that brings out strong, vigorous, livable chicks and that can be depended upon to take care of itself to the fullest extent—such an incubator is cheap at any price.

Write for descriptive catalog.



Wishbone Brooders

Valveless, Oil-Burning, Blue-Flame

The Wishbone has been enthusiastically welcomed by poultrymen all over the country. They appreciate the fact that it is the most satisfactory brooder ever marketed. The Wishbone Valveless Brooder is as simple to operate as a good cook stove. It consists of only four main parts—the tank, the burner, the oil pipe and the hover.

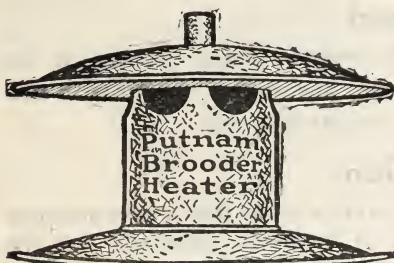
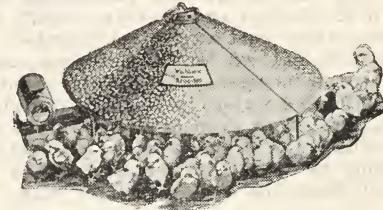
When you want to light the brooder you turn

the adjusting handle and touch a match to the burner. A hot, blue flame shoots right up. No priming. No pre-heating.

The oil flows down the big half-inch oil pipe as surely and continuously as it would flow through a funnel. And there isn't a valve or thermostat or strainer in the entire brooder to go wrong or start trouble. The Wishbone is the only valveless brooder.

What It Costs

No. 22—	50-100 chicks (with 22-inch canopy),	\$12.00
No. 32—	350 chicks (with 32-inch canopy),	16.00
No. 42—	500 chicks (with 42-inch canopy),	19.00
No. 52—	1000 chicks (with 52-inch canopy),	22.00



THE BROODER HEATER

Putnam Brooder Heater

By using this heater one can make at home a brooder suitable for from 35 to 60 chicks at very little expense. The materials used to make it are one shoe box, one-sixth yard of oilcloth and one Putnam Brooder Heater. A 14-year-old boy can build one in an hour with no tools but saw and hammer. This brooder will accommodate from 25 to 60 chicks and will take better care of them than any brooder made, no matter how elaborate or expensive. The heater requires filling but once a week and no further attention in the meantime. Guaranteed to give satisfaction.

Price only \$4.75 postpaid

Little Putnam Stove

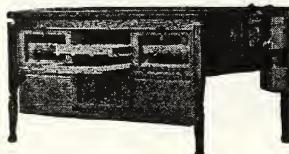
This stove may be used with any style poultry fountain to warm the water in cold weather. It is made of galvanized iron, is nine inches in diameter and four inches high. The oil tank holds oil enough to burn three weeks without refilling. It is fireproof and non-explosive, and if tipped over will go out.

Price, \$2.00 postpaid



Queen Incubators

The "Queen" is an Incubator Built Upon Principle and Common Sense



PRICE

No. 4. 275 eggs	with turning trays	\$57.75
No. 5. 400 eggs	" " "	76.50
No. 25. 600 eggs	" " "	97.50

Egg Turning Trays

These can be furnished if desired. The 30-in. tray, price \$4.00, fits Nos. 4, 5, 25 and 30. The 40-in. tray, price \$6.00, fits No. 40.

Self-Supporting Egg Trays

It is expensive to have a tray of eggs slip out || a Queen. It has self-supporting egg trays. Most and drop to the floor. This cannot happen with || of the cheap machines have no protection.

Proper Insulation

The Queen is doubly insulated. First, we use || double walls of California redwood, forming a dead air space. Second, corrugated strawboard || is used between the wooden walls. Proper insulation adds considerable expense to the manufacturing cost. However, it is an absolute requirement of a good incubator.

Queen Hot Water Heating

The Queen system of hot water heating prevents the drying out tendencies found in hot air incubators and provides a soft, uniform heat over every part of the egg chamber—a heat that is most natural for the hatching eggs. When it becomes necessary for you to remove the lamp, the heated water circulating through the radiator maintains an even heat within the egg chamber without the slightest variation, while, should the lamp be forgotten, the heat stored in the water will keep the eggs warm for many hours. Hot

water is admittedly the best heat for incubators.

The radiator and boiler of the Queen heating system is made of copper (not copperized tin) that has been rolled into sheets without heating, which gives added life, strength and ability to stand more wear and tear than the ordinary sheet copper, and is placed close to the inner top of the incubator. This form of placing allows the heat to reflect from the floor of the egg chamber and to more evenly affect the germ which always rises to the upper surface of the yolk.

Why We Use Redwood

California redwood is conceded by all to be the best wood for incubator construction, as it will not warp, split, nor absorb moistures or odors during use. It is a wood that insects

seldom attack, because of an acid element the lumber contains, and, being free from pitch, offers strong resistance to fire.

Special Heat Regulation

This is a vital factor in incubation, for an incubator must not only be supplied with heat, but it must have exactly the required amount at all stages of the hatching period. In other words, the source of heat must be self-regulating and sure.

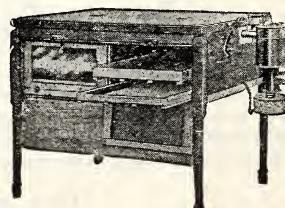
The manufacturers of the Queen have designed and patented a regulator especially for the Queen, with which they guarantee a regulation to within a small fraction of a degree.

Style K

This line was gotten out to supply a demand for a moderate priced machine for those who do not feel they can afford a Standard Queen and is superior to any machine of its class. It is constructed of redwood, has copper heating system, regular Queen regulator, but having no air space between the double walls is more easily affected by extremes of temperature than the Standard Queen.

No. 22, 220 eggs

\$36.75



Queen Brooders

The Queen Colony Brooder is a new and improved design of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the Queen. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located at the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover.

As will be seen from the illustration, the check and draft lids are cast together and operated together. Thus, when the fire is too hot, the wafer expands and closes the draft and opens the check, both at the same time. When it is too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it will do the rest.

SUPERIOR QUEEN GRATE

The grate in the Queen stove is the rocker type and strikes the fire at four points. This is far superior to any draw center or shaker grate because it cleans the fire thoroughly, and by striking at four points will break up and remove all clinkers.

COLLAPSIBLE HOVER

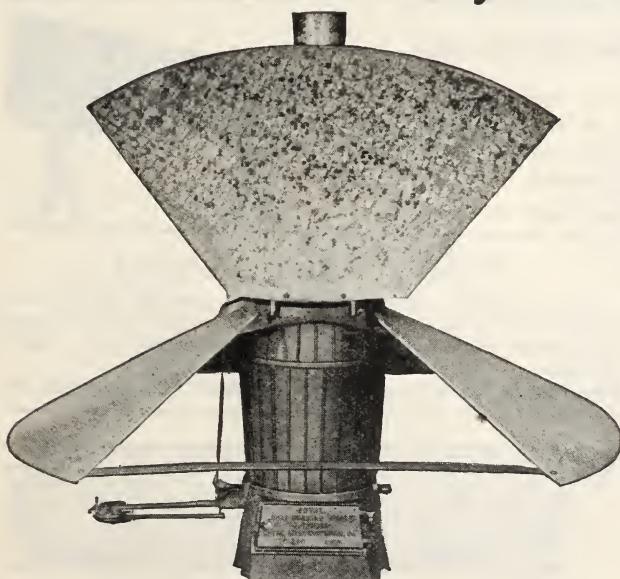
The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. This hover comes knocked down, with holes

punched and stove bolts attached, ready for putting together. By being collapsible, it enables you to save room when storing, and lessens the danger of damage when not in use.

No.	Chick Capacity	Size Hover, Inches	Height, Inches	Diam. Grate, Inches	Shipping Weight, Pounds	Price
1	600	52	23	9	77	\$18.00
2	1200	56	26	10 1/4	104	22.50
4M	1600	60	37	13 1/2	165	30.00

Add for 10-foot galvanized pipe, pipe cap and damper No. 1, \$1.80; No. 2 and No. 4M \$2.75.

Royal Brooder



The new Royal has all the modern features and meets all competition. It is the best brooder on the market. Extra heavy grates, extra coal capacity, and a fire box shaped scientifically correct, make it the first choice of all poultrymen. Canopy is removable and is especially easy to handle because of the hinged feature. Double filled wafer Thermostats control both check and lower draft dampers. No. 5 and No. 6 brooders have canopies with front quarter hinged. No. 7 brooder has folding canopy, front half can be raised and fastened to band around pipe. All have cast canopy rings and outer edge of canopy wire bound. 5-inch pipe size. No. 7 stove enameled moss green.

No.	Coal Cap., er.	Hgt., In.	Size Chick Cap., er., Hgt., Hov., In.	Diam. Grate, In.	Ship- ping Wgt., Lbs.		Price
					5	6	
5	500	44	52	23	9 1/2	100	\$15.95
6	1000	58	56	25	10 1/4	120	19.95
7	1500	73	60	33	12 1/2	163	26.95

For 10-foot length 5-inch galvanized pipe, pipe cap and damper, add \$2.75.

The Philadelphia Caponizing Set



There is no doubt as to the advantages of caponizing. The operation is very simple, and with a "Philadelphia" Caponizing Set, it can be performed with safety and thoroughness.

Price, per set, \$3.00. By mail, \$3.05

X-Ray Egg Tester

Is made of galvanized iron and consists of a central cylinder or lamp flue 5 1/4 inches high, with an outside diameter of 2 5/8 inches at the base and 2 3/8 inches at the top. It is designed for use on an ordinary hand lamp, and fits over any style of burner with a diameter approximating that of the tester.



X-Ray Egg Tester

Price, 40 cents; postpaid, 45 cents

Wilder Moisture Gauge for Incubators

This instrument is designed to meet the demand of the practical poultryman for a simple, direct reading gauge which will enable him to keep the amount of moisture in his incubator as near as possible to a desired point.

By noting the position of the mercury column, the operator can tell at a glance whether to increase or decrease this amount.

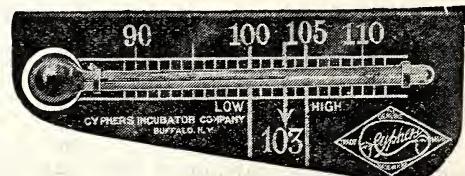
Price, \$1.25. By mail, \$1.30



High Grade Tested Thermometers

The price of incubator thermometers does not include the wire hanger. Wire hangers will be supplied at ten cents extra for each thermometer. In ordering wire hangers, be sure to state size of your incubator and year manufactured. If machine has no packer's slip bearing date of manufacture, send description of machine. This is important.

When ordering brooder thermometers, name the style of brooder in which it is intended to be used.



Cyphers Incubator Thermometer
Price, 75 cents. By mail, 80 cents

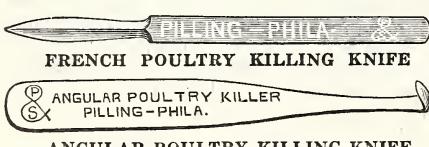
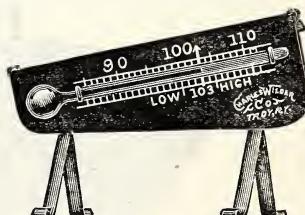


Brooder Thermometer
Price, 75 cents
By mail, 80 cents

Wilder Thermometer

Illustration shows the thermometer with legs unfolded. Easy to see, and may be quickly placed in any part of egg tray. Accurate to the smallest degree.

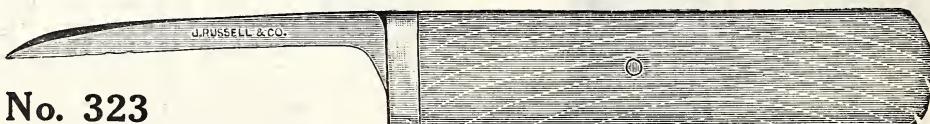
Price, 75 cents. By mail, 80 cents



Poultry Killing Knives

Every poultry raiser should have one of our killing knives. They are made of finely tempered instrument steel, with nickeled handle. Sent, postpaid, on receipt of price.

Angle blade, 50c.; French, straight blade, 50c. By mail, 55c



Russell. No. 323

65c. each By mail, 70c.

PRATTS PREPARATIONS MEAN HEALTH



Pratts

FOR HEALTH AND EGGS
POULTRY REGULATOR

has no equal. It is the world's original poultry regulator and has been the standard for over 60 years. Not a dope or stimulant but a natural tonic supplying numerous health necessities required by heavy laying hens and breeding stock. Tones up the system, regulates bowels, aids digestion, sharpens appetite, wards off diseases and increases vitality.

Added to any mash it makes more eggs. Use it the year round and make bigger profits. Guaranteed to give satisfaction or your money back. 25c, 50c, \$1.40 packages; 25-lb. bag, \$2.60; 25-lb. pail, \$3.00; 100-lb. drums, \$10.00.



Pratts

N - K
TABLETS

Fresh, powerful Nicotine and Kalmala encased in a special insoluble coating which when crushed by grit in gizzard, releases contents into intestines, quickly killing round and tape worms. A guaranteed individual treatment.

Adult Size—Pkg. 50 tablets, \$1.00; pkg. 100 tablets, \$1.75; pkg. 500 tablets, \$7.00. Chick Size—Pkg. 50 tablets, 65c; pkg. 100 tablets, \$1.00.



Pratts

Powdered
Lice Killer

A powerful and economical lice killer that quickly rids your fowls of these profit eating pests. Use it on the poultry, in the nests and dust boxes, etc. Also used to free horses, cows, sheep, dogs, cats, etc., from lice, fleas and other vermin. Easy, safe and effective to the highest degree.

In sifter top cans at 25c and 50c.

Pratts

RED MITE
SPECIAL

is a powerful preparation put up specially to rid flocks of red mites, ticks, blue bugs, fleas and like blood sucking vermin. It should be sprayed or painted on the roosts, dropping boards, nest boxes, and in all cracks. One application is effective for months. Many times more powerful and effective than ordinary liquid lice killers. 60c a quart; \$1.00 a $\frac{1}{2}$ gallon; \$1.60 a gallon.

If poultry keepers would regularly spray the chicken houses, roosts, dropping boards and utensils with

Pratts, Disinfectant

most common troubles would vanish.

Four times as powerful as crude carbolic acid. A sure deodorizer, germicide and liquid lice killer. Use it to aid in the relief of roup, colds and other contagious diseases.



Pratts

R - P TABLETS
Formerly Roup Tablets

Use it as treatment or preventive. An easy powerful remedy with a long record of success in the treatment of colds, "roup," canker, catarrh, etc. Keep a box always at hand, guaranteed to give satisfaction.

25c and 50c pkgs.

Pratts

CHICK
TABLETS

Formerly Chick Diarrhea Tablets

Use this in the chicks drinking water for the first ten days and you will avoid losses from most common bowel troubles. This is "life insurance" for chicks that will save you dollars. Very easy to use and fully guaranteed. 25c and 50c packages.

Pratts, Condition
Tablets

Not only for show birds but for all fowls that are out of condition and need toning up. Valuable for treating individual birds that are "off their feed." Efficient in treating colds, liver and digestive troubles. Always keep a box at hand. 25c and 50c per pkg.

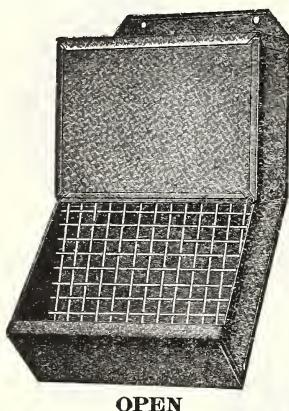


Pratts

Guarantee Means—Pratts are the oldest and largest manufacturers of stock and poultry preparations in America. They have had over half a century's experience and their remedies have been in successful world-wide use on the largest and smallest flocks and herds. Therefore every Pratt Remedy is guaranteed to give satisfaction or your money will be refunded.

Sexton Dry Feed Hopper

This hopper is arranged to hang on the wall the desired distance from the floor and never need be removed from the wall to be refilled. It is impossible to waste any feed, as the pan at the



OPEN



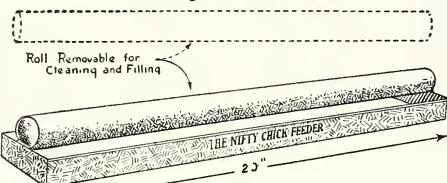
CLOSED

bottom takes any feed that may be picked out, and the last crumb can be used, therefore saving any waste. The body being covered keeps feed dustproof and clean, and is always dry. Body made of galvanized iron and the grating is of round galvanized wire, preventing the poultry from cutting their bills. The lower cover is so arranged that it is held up by locking the top cover of hopper over same, and by raising the top cover the lower cover will fall in place. Simple in construction, easily operated and absolutely "rat" and "mouse" proof. Made in three sizes.

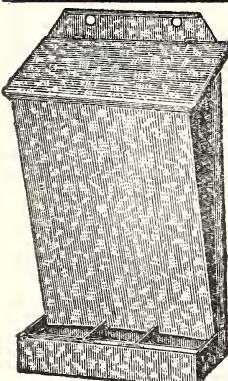
PRICE

	By Mail	By Mail
No. 5, 24 quarts capacity,	\$2.65	\$2.90
No. 1, 12 quarts capacity,	1.50	1.65
No. 2, 3 quarts capacity,	1.10	1.22

Nifty Feeder



Roll keeps chicks out of feeder.
Price
20-inch, \$.25—by mail, \$.33

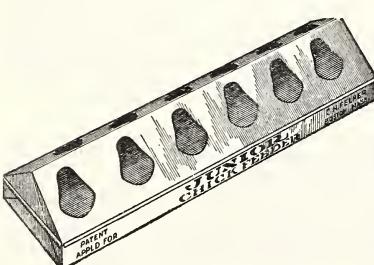


Made of best grade galvanized iron, in two sizes. Has three compartments, for grit, oyster shell and charcoal. Cover lid on a slant prevents fowls roosting on the box and keeps contents clean.

Price

	By Mail
Small, \$1.00	\$1.12
Large, 1.15	1.30

Junior Chick Feeder



Can be used either for dry feed or for water. Easily cleaned and so made that the chicks cannot soil the feed.

Price
10 in., \$.25
By mail, .30
20 in., .40
By mail, .48

Norwich Automatic Feeder

"FILL THE HOPPER AND THE BIRDS DO THE REST"

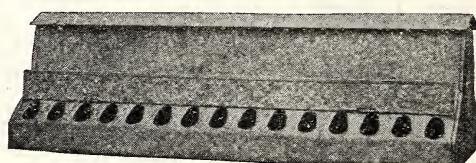
Fill the hopper with any dry grain feed, or any mixture of dry grain feed, and the revolving bait bar with cracked corn. Stand the Norwich Automatic Feeder anywhere in the yard, pen or house, and put any kind of litter under machine. Adjust valve to feed desired quantity. Adjust legs for required height. Every kernel of grain put in the hopper will go to the flock. Nothing will be lost from any cause. The exercise given by the action of the machine is just sufficient to keep the flock in perfect condition; a few days' trial will show the breeder that the flock will be bright and alert, and with a total absence of dull, stupid or drooping appearance.

Price—No. 1, 8-quart hopper, weight 14 lbs., \$5.00
No. 2, 14-quart hopper, weight 15 lbs., 5.50
No. 3, 20-quart hopper, weight 20 lbs., 6.50



Senior Chick Feeder

For Large Pens of Chicks



This feeder is 30 inches long, feeds on both sides, and has a capacity of 25 pounds of mash. A special attachment permits closing the feed space at night as a protection against mice and rats.

Price, \$2.50. By mail, \$2.75

"Giant" Mash Feeder

CAPACITY 100 LBS.

A continuous flow of mash into feeding space is assured by an entirely new but simple mechanical principle. The fowl when feeding, come in contact with a series of movable wires the least jarring of which tends to loosen any clogging of the feed in its downward flow.

The circular feeding space of nearly seven feet which the "Giant" affords will accommodate more fowl than twice that amount if in a straight line. Its construction eliminates all waste. Its large capacity and the automatic control reduces the amount of attention needed to a minimum and makes it a wonderful labor saver. Hood can be lowered to protect feed from rats, mice, birds and weather.



"Giant" Mash Feeder
PRICE \$10.00

No. 328—30-in. Chick Feeder
Price, \$.50; by mail, \$.65

No. 330—60-in. Chick Feeder
Price, \$1.00; by mail, \$1.30

These feeders are made of galvanized iron with a rod across the top to keep the chicks out of the feed and have a rounded bottom, making them very easy to keep clean.



Stone Fountain

PRICE

1/4 gallon	\$.40
By mail, .....	.52
1/2 gallon .....	.45
By mail, .....	.63
1 gallon .....	.55
By mail, .....	.80
2 gallon .....	.90
By mail,	1.15

Round Table Drinking Fountain

FOR POULTRY

This is the well known Handy Attachment principle applied to a large fountain. Easy to clean, easy to fill. These fountains provide over four feet of drinking space. A detachable cone top prevents fowl from roosting on fountain.



PRICES

5-gallon	\$2.75
8-gallon	3.25

FOR CHICKENS

Like the above except for the cone top and with a narrower space between the pan edge and water container.

PRICES

3-gallon	\$2.00
5-gallon	2.50

Hanging Dry Mash Feeder

A REAL FEED SAVER

A mash feeder designated to be used either hanging or set up off the floor at proper height. Special grid features prevent waste and insure against clogging. Comes equipped with fixtures for hanging. Feeding area about 5 feet in circumference. Made in two sizes with non-roosting covers.

TWO SIZES

No. 332. 13 in. high \$3.00 Each
No. 334. 18 in. high 4.00 Each

Open Top Fountain

The Open Top Fountain is made in two sections. The upper section, which has a bail, serves as a pail to use in filling the lower section, after which it is turned over the lower section, making it a self-feeding fountain. The container for the water extends completely around the fountain, giving a large drinking space. All parts easily reached for cleaning.

PRICES

3 Gal.,	\$1.75	5 Gal.,	\$2.25
By mail, add	25c		

Cone Chick Fountain

This is a most satisfactory fountain, as it is easy to clean and has a large space for drinking. Made in three sizes.

PRICES

By Mail

1 qt.	\$.30	\$.38
2 qt. .....	.40	.48
3 gal.	1.25	1.40



Ideal Sanitary Poultry Drinking Fountains

The simplest, handiest and most practical fountain made. Keeps water the right temperature all the year. Has no lamps to trim and valves to get out of order. Saves time, labor and worry, and costs nothing to run. The open pan or drinking fountain gave to poultry only stale or filthy water, which was too warm in summer and too cold in winter. These conditions led to devising a fountain in which water could be kept pure and clean and of desired temperature in any climate.



The fountain is made of galvanized iron, and is similar in construction to the fireless cooker, being packed with a non-conducting material to retain the temperature of the water.

Size	Extreme Height	Diameter	Weight	Price	By Mail
2 gallon	15 $\frac{1}{2}$ inches	13 inches	15 pounds	\$3.50	\$3.75
3 gallon	17 inches	14 inches	20 pounds	4.00	4.30
5 gallon	20 inches	16 inches	25 pounds	5.00	5.35

Felker's Insulated Duplex Sanitary Poultry Fountains

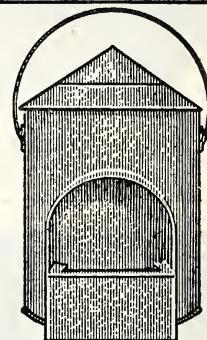
The "Insulated Duplex" is unquestionably a big step forward in the development of poultry drinking fountains.

Its construction makes it as handy to clean as a common pail. The top or inside container slides into the bottom section or base, and can be removed without inconvenience at a moment's notice. The water is kept pure and clear at all times.

The extra large opening, or drinking trough, which this fountain carries makes it easy of access to a number of fowls at the same time.

An entirely new and improved method of insulation enables this fountain to keep water at an even temperature the coldest day of winter and the hottest day of summer. It will not freeze.

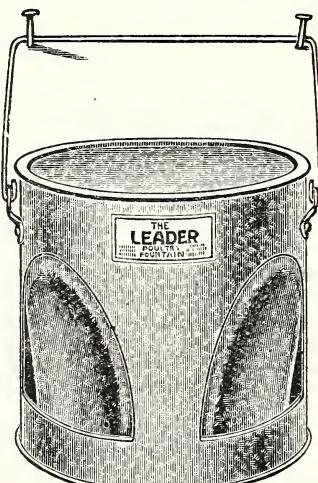
Price, 3 gallons, \$4.50; by mail, \$4.80. 4 gallons, \$5.00; by mail, \$5.35



Leader Fountain

This new fountain is one of the most popular fountains on our list. It is made in two sections like the Duplex so as to be easily cleaned but is less expensive.

Price
1 $\frac{1}{2}$ gal. size \$.85
By mail, .95
3 gal. size, 1.50
By mail, 1.65

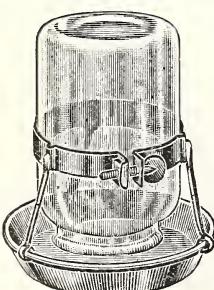


FELKER'S HANDY ATTACHMENT For Any Make Fruit Jar

A Perfect Feeder for Sour Milk, Water, Hard Grain or Grit

The container, of aluminum, is rust-proof and non-corroding.

Price, 25c.; by mail, 30c.



The Keystone Fountain



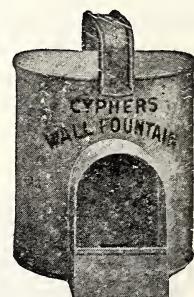
PRICE
1 quart, \$.55 \$.62



Wall Fountain

A galvanized iron hood keeps dirt from dropping into the water, yet allows fowls to drink readily. They are convenient to handle and are so made that they can be hung on the wall above the floor.

PRICE
1 gallon \$.90
By mail, 1.00
2 gallons 1.25
By mail, 1.35



The Peerless Fountain

Protected from dirt and filth. The fowl cannot injure their combs while drinking. Easy to clean and fill. Made of heavy galvanized iron. Durable and practical.

PRICE

Chick size, 35c.; by mail, 40c.



Jamesway Makes Poultry Pay

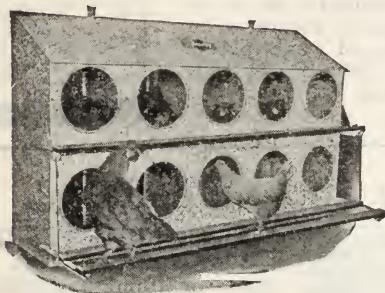
Baby Chick Waterer



Built of heavy steel sheets. Easily washed and thoroughly cleaned by removing water pan below. Pan detachable for cleaning and filling. Capacity, 1 1/2 gallons for 100 chicks or less for twenty-four hours.

Price, \$1.25. By Mail, \$1.35.

Self-Cleaning Nests



Built of steel sheets with inclined top, preventing hens from roosting above. Back of nest open, making cleaning easy. No harboring place for lice. Perches swing up against face of nest section. Made in 3, 6, 10, 15 nest sections, with 9 1/4 inch hole.

Prices—3 nest size, \$5.00; 6 nest size, \$8.25; 10 nest size, \$11.50; 15 nest section, \$16.00. Traps for nests, 40 cents extra each.

Wall Feeders

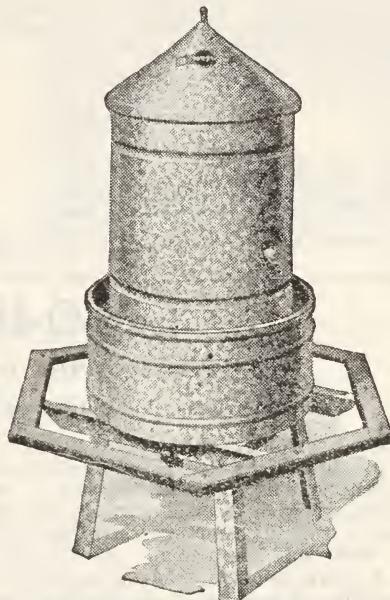
With perch and feed-saver pan.

19 in. holds 20 lb. mash.....	\$4.80
35 in. holds 40 lb. mash.....	6.50

No Waste Chick Feeder

For 200 baby chicks.....\$7.50

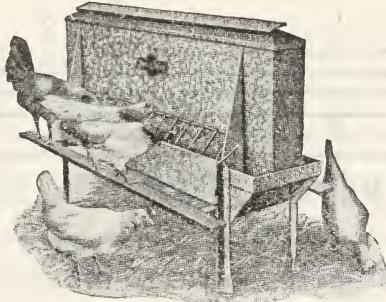
Gravity Waterer (8 Gallon)



The drinking pan extends all the way around the waterer, providing room for from 12 to 15 hens to drink at a time. Lamp burns for one hundred hours without refilling.

Price—With stand, \$9.40; without stand, \$7.90.

Free-Feed Hen Cafeteria



SAVES FEED

A feed-saver pan fitted below the feeding trough on either side catches all feed thrown out by the hens.

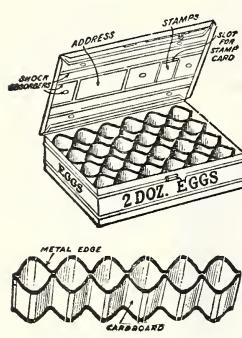
SAVES TIME

The small feeder holds 50 pounds mash, 15 pounds shells, 15 pounds grit, 9 pounds scraps and 5 pounds charcoal. For 75 to 100 birds. The large size, 100 pounds mash and the same amount of the other feeds. For 150 to 200 birds. Easy to fill, easy to clean.

Prices—3 feet, \$9.50; 5 feet, \$14.00

Sell Eggs By Mail

TO YOUR CITY FRIENDS SHIPPED IN ALUMINIZED METAL EGG CRATES



Metal-Edge Filler

Made for interchangeable shipments. Indestructible—will last for years. Pays for itself in a few shipments. Buy yours now and realize more money on your eggs. Your friends want them.

THE METAL-EDGE FILLER is a wonder. A new invention and cannot be beaten for service and safe carrying of eggs. Light in weight and very strong. Thousands of these economy crates in daily use.

Sizes	Weights	Postage	Price
1 1/2 doz.	3 lbs.	9c.	12c.
2 doz.	3 lbs.	9c.	12c.
3 doz.	4 lbs.	10c.	14c.
4 doz.	5 lbs.	11c.	17c.
6 doz.	6 lbs.	12c.	21c.
9 doz.	8 lbs.	14c.	27c.
12 doz.	10 lbs.	16c.	32c.

Add postage to destination. Rates above apply within 150 miles. Write us about crate to ship butter and eggs.

Egg-O-Hatch

FOR BETTERING THE INCUBATOR HATCH

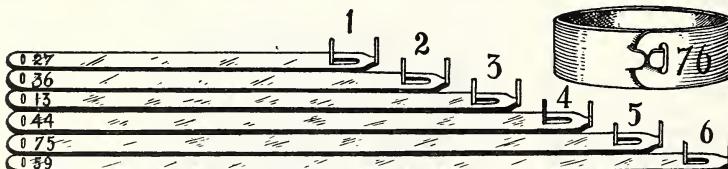
Strengthens the Chick and Weakens the Shell

The most serious problem confronting the poultryman is the percentage of strong, livable chicks that he will receive at hatching time and the percentage that will appear as "dead in the shell." Incubator hatching is different from hen hatching, with eggs of various age and hardness of shell, less frequent shifting or turning and excessive feeding of meat, grain, etc., to breeding stock. Poor hatches are not so often the fault of the incubator as of the eggs. A weak chick in a hard, tough shell has little chance to emerge from the shell, but if you have, at hatching time, strong chicks and weak, porous shells, they will not only hatch better but will grow and thrive better after hatching. To save the shell-bound chicks, use "Egg-O-Hatch."

Price, 50 cents; by mail, 57 cents.



Leg Bands for Poultry and Pigeons



DOUBLE CLINCH LEG BANDS

POULTRY SIZES
CUTS SHOW EXACT LENGTH

Double Clinch Leg Bands A BIG SELLER

Made of aluminum, with large raised numbers

These bands are neat, easily applied, and cannot come off by accident.

In ordering state what breed they are for, and what letters or numbers you wish put on them. No. 3 is the size most generally used for poultry.

Stock constantly on hand, packed in boxes of 100, numbering from 1 to 100.

Price, 85 cents per hundred.

Special price for 1000.

Colored Spiral Celluloid Leg Bands



Will identify birds as far as one can distinguish colors. Indestructible and can be slipped on and off like a key ring.

Red, white, blue, amber, green, black, pink, ruby.

Price, 75 cents per hundred, postpaid.

Bandettes

(Reg. Trade Mark)
THE WORLD'S
BEST LEG BAND
Most Practical
Simple, Neat

Bandettes are easily applied single handed. Simply open out Bandette, hook it on leg, and allow it to close around the bird's leg; should not fit tight. We make two sizes: No. 9 for Leghorns, and No. 11 for Rocks, Reds, etc. Bandettes are made in 5 colors: Blue, Red, Yellow, Green, Pink.

Bandettes are sold only in unbroken sets of 25 in one color: 1-25, 26-50, 51-75, 76-100, and so on.

Price, 20c. per doz.; \$1.50 per 100.

Leader Leg Bands

These are flat, colored aluminum bands with the figures in black on the colored ground, and are adjustable to any size fowl.

Price, \$1.50 per hundred, postpaid.

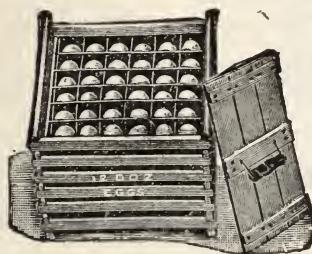
"K. & W." Egg Cases

The Most Popular Egg Case in the Market and Used Largely by Shippers of Eggs

These cases in the fifteen dozen and thirty dozen sizes are made deeper than the standard cases, so as to permit the use of the extra deep fillers with which they are fitted and the Mapes' safety cushion flats. Four extra flats are included, which take the place of the excelsior cushions which are usually used.

PRICES COMPLETE

8 dozen	\$1.10; by mail, \$1.25
15 "	1.85; " " 2.05
30 "	2.35; " " 2.61
49 " (too large to mail)....	2.85;

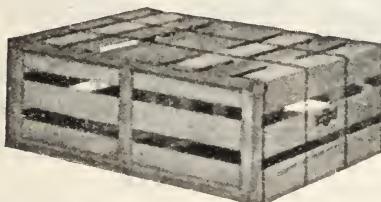


Humpty Dumpty Egg Crate

A light, strong and inexpensive crate for carrying eggs to market or shipping by express. These crates are fitted with the Mapes' safety cushion flats, which almost eliminate breakage. We carry these in three sizes.

PRICES	
3 dozen, By mail,	50c. 60c.
12 dozen, By mail,	70c. 85c.

Superstrong Shipping Crate



Here is the Poultry Crate that fits today's needs and conditions. Its name tells its merits. It's strong, extra strong, Superstrong. It's wirebound, which gives it its strength.

A hollow tube is always stronger than a solid bar, and so a wirebound crate is structurally stronger than any other type.

But there's one quality its name doesn't indicate—a quality necessary to today's conditions and your needs—economy.

Superstrong Wirebound Poultry Crates are low in first cost, can be set up and packed in a twinkling, and are 100% adequate in service.

If their service ends with one trip due to quarantine or other reasons, they are still economical to you.

The job of setting them up requires just a few motions.

Price, \$1.00

Shipping Boxes

FOR DAY OLD CHICKS

These chick boxes are made of a staunch grade of corrugated fibre board and when assembled will support heavy pressure without collapse. These boxes conform to International Baby Chick Association specifications in size, shape and interior arrangement. Each compartment carries twenty-five chicks without crowding. The 100 chick size has but four separate pieces—the box, the cover and two crossed partitions; the 50 chick size has a single partition, and the 25 chick size consists of box and cover only. The boxes are always shipped knocked down flat. The separate parts are accurately cut and scored for quick set-up.

25 chick, 15c; 50 chick, 20c; 100 chick, 30c

Egg Case Cushions

These cushions are made of excelsior, eleven inches square and about one-half inch thick, for use in either fifteen or thirty dozen egg cases, to prevent the eggs from being broken in shipment. Price, \$1.70 per hundred; by mail, \$2.03.

Lee's Germozone

The Life Saver for Chicks

For more than 30 years Germozone has been the great remedy for nasal, crop and bowel disorders. It acts quickly against the germs and poisons, and helps to heal the affected membrane lining. There is nothing else just like Germozone. It is especially valuable in case of sour crop, simple diarrhoeas, limber neck, ptomaine poisoning, musty foods, colds, canker, swelled head, and as an aid in repairing the damage done by worms and coccidiosis.

12-Oz. bottle, 75c; Qt., \$1.50; 1/2 Gal., \$2.50;
Gal., \$4.50.

Vapo-Spray

Vapo-Spray is a compound of healing oils. It is simply wonderful for the treatment of Colds and respiratory troubles which occur very frequently among poultry during the late Fall and Winter months. It's so simple and easy to use. Just spray it in the air of the poultry house at night, using a common hand spray pump such as is used in spraying fly oil on a cow. The chickens breathe the vapors given off, which produce almost instantaneous relief.

1 Qt., 75c; 2 Qt., \$1.25; 1 Gal., \$2.00; 5 Gal.,
\$8.75.

Flu-Koff Emulsion

Flu-Koff Emulsion is a companion medicine of Vapo-Spray. It is a cough syrup which greatly helps to allay cough, reduce temperature and overcome irritation and inflammation. Especially recommended for use with Vapo-Spray in very severe cases of Bronchitis. It is given in wet mash or soaked oats.

12 Oz. \$1.00; 32 Oz., \$2.00; 1/2 Gal., \$3.50;
1 Gal., \$6.50.

The Collins Sprouter

Why It Will Earn You Money



It will make hens lay when eggs bring high prices. And to get eggs at that time you must make conditions like those of springtime, when the hens lay naturally. In the spring there is always plenty of fresh green grass, but you can furnish winter green feed at small cost, which is quite as palatable and even more nourishing. Sprouted oats will "make the hens sing." It will give you better hatches, is invaluable in the breeding pen. It furnishes much needed green feed for baby chicks. 8 pans, 11x15 in., weight 14 lbs.

Price, \$4.00

Lee's Gizzard Capsule

Goes directly to the worms

The GIZZARD CAPSULE is a triple combination medicine, for Tape Worms, for Round Worms and for Pin Worms. The medicine is enclosed and sealed in an air tight insoluble container which carries the medicine through the crop, through the stomach and into the Gizzard. There it is ground up, like a grain of corn, releasing the medicine in full strength at the door of the intestines, where it is poured in upon the worms.

PRICES, CHICK SIZE

50 Capsule package.....	\$.50
100 Capsule package.....	.90
250 Capsule package.....	2.00
500 Capsule package.....	3.50
1000 Capsule package.....	6.00

PRICES, ADULT SIZE

50 Capsule package.....	\$ 1.00
100 Capsule package.....	1.75
250 Capsule package.....	4.00
500 Capsule package.....	7.00
1000 Capsule package.....	12.00

Water Glass

Saves Money and Helps Keep Down the High Cost of Living



Put your eggs down in the spring, when they are cheap, and keep them fresh for winter use. One gallon makes sufficient solution for fifty dozen. Do not trust eggs to water glass of inferior strength.

PRICES

1 pt.,	15c.	by mail,	23c.
1 qt.,	25c.	by mail,	36c.
1 gal.,	75c.	by mail,	\$1.00

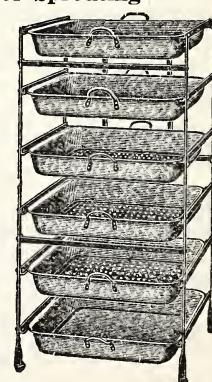
No. 110

Oats Sprouter

The Natural Process for Sprouting

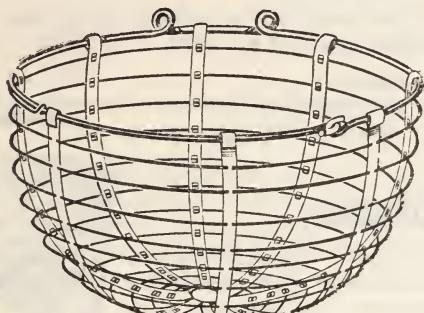
Contains five sprouting pans and one drip pan 16 x 17 inches. Iron rack is 35 inches high.

By feeding sprouted oats through the winter, egg production can be kept up to a much larger degree than otherwise.



Price, \$6.25

Wire Hen's Nest



Strongly made of heavy wire, and very durable. Fastens to the wall with two heavy screws. Easily kept clean. No harbor for vermin.

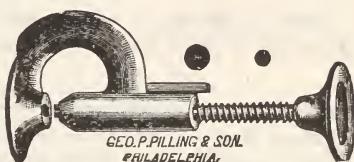
Price, 25c.; \$2.50 per doz.

By mail: 35c.; 2.65 " "

Philadelphia Poultry Marker

Do you keep a record of chickens? There is no better or quicker way than by marking, as many different marks can be made by punching web between the toes. Made in two sizes.

Price, 25c.; by mail, 27c.



GEO.P.PILLING & SON
PHILADELPHIA

Perfect Chicken Punch



Chicks may be marked as soon as hatched without injury.

Price, 25c.; by mail, 27c.

The Surecut Poultry Killer

The SURECUT is gauged to properly cut and bleed the smallest broiler as well as the largest turkey. One movement cuts the blood vessels and causes a special attachment to the knife to penetrate the brain which paralyzes the feather muscles and permits dry picking. Sure, easy, sanitary, quick and humane.

Price Prepaid, \$5.00



Lee's Lice Killer

A liquid preparation having all the killing properties of any powder or dip; besides, the vapor that it gives off is destructive to insect life, though harmless to fowl. It permeates every crack and crevice of the poultry house and all the hiding places of vermin and destroys them.

PRICE

1 qt., 60c.; $\frac{1}{2}$ gal., 90c.; 1 gal., \$1.60

Fyler's Red Mite Destroyer

THE WONDER SPRAY!



Red mites are one of the greatest handicaps in poultry raising. They live and breed on the roosts, dropping boards and surrounding walls, infesting the birds only at night when the birds are on the roosts. They suck the blood from the bird, weakening its vitality, and may cause spread of disease. Fyler's Red Mite Destroyer will not only destroy this vermin but when used at proper intervals will keep a coop free from them.

Red Mites do even greater damage if allowed to get established in colony houses where growing stock are roosting. With new buildings it is advisable to spray with Fyler's Red Mite Destroyer before they are used.

"BEST BY TEST"

Simply spray thoroughly the roosts, dropping boards, nests, and wall near them with Fyler's Red Mite Destroyer once or twice a year and keep your poultry house free from this costly pest. The increased egg production from mite-

free birds more than offsets the slight cost of the material.

Fyler's Red Mite Destroyer is used and recommended by most of New England's leading poultry raisers. One trial will convince you—as it has thousands of others.

ABSOLUTE MONEY-BACK GUARANTEE

1 qt. bottle, 60c. $\frac{1}{2}$ gal. can, 90c. 1 gal. can, \$1.50 5 gal. can, \$6.00 10 gals., \$11.50

Pratt's Poultry Worm Powder

Kills all kinds of worms and is easy to use. || go ahead and feed as usual. Treatment costs Just mix it with any mash you are using, then || less than one cent per bird.

Price, 50 cents per package.

More work out of your horses, more milk from your cows, fatter hogs—these are a few of the benefits that come from using

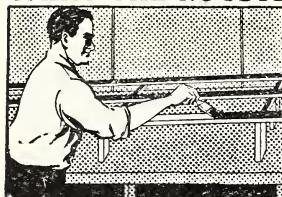
Pratt's Animal Regulator

This is the original and pioneer stock regulator of America. Tested thoroughly for nearly half a century, its worth is known and recognized by stock owners the world over. Always sold on a guarantee that it will satisfy you or your money back.

25c., 50c. and \$1.00. 12 lb. pails, \$2.15; 25 lb. pails, \$3.40.



'PAINT' THE ROOSTS



WITH 'BLACK LEAF 40'

"Black Leaf 40"

WORKS WHILE THEY ROOST

Delouse Entire Flock by Painting the Roosts with "Black Leaf 40"

When chickens perch upon roosts that have been "painted" with "Black Leaf 40," fumes are slowly released and penetrate the feathers, killing the body lice; no interference with egg production nor any discomfort to the birds. It is for these several reasons that poultry experts have welcomed the "Black Leaf 40" treatment so enthusiastically. Indeed, this treatment is so easy and effective that poultry owners will be practicing very false economy if not promptly ridding their flocks of lice.

How To Apply Treatment for 5 Birds or 5,000 Birds

One ounce of "Black Leaf 40" will "paint" about 12 or 15 running feet of roost; or one pound to 190 to 240 feet. "Paint" a thin film of "Black Leaf 40" on the top of the roosts and cross-arms, about half an hour before the birds perch for the night; on warm, still nights in the Fall, Spring or Summer.

Some run a thin line of "Black Leaf 40" on the top of the roosts from an oil can, and spread it with a feather. In coops with wire bottoms, apply "Black Leaf 40" to wire bottoms with a paint brush.

Avoid cross-draughts when the treatment is

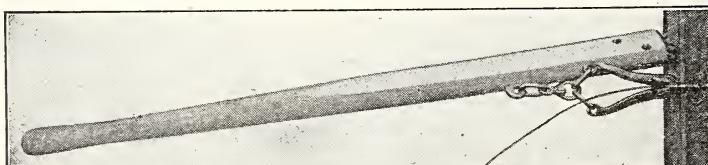
applied, so that the fumes from "Black Leaf 40" may have opportunity to penetrate the feathers thoroughly.

Lice eggs usually hatch in 6 to 8 days. The killing effect of "Black Leaf 40" lasts for some days after the application. Some experimenters state that one application of "Black Leaf 40" to the roosts will remain effective long enough to kill the young lice or "nits" when they hatch out. In any event, since the treatment is so easy and cheap, a second application made ten days after the first will completely rid the birds of body-lice.

PRICES

10-lb. tin (treats 1900 to 2400 running feet of roost)	\$11.85	1/2-lb. bottle (treats 90 to 120 running feet of roost)	\$1.25
2-lb. tin (treats 385 to 480 running feet of roost)	3.75	1-ounce bottle (treats 12 to 15 running feet of roost) .....	.35

The Townsend Wire Stretcher



The Townsend Wire Stretcher is made with a wooden lever or handle three feet in length, to which is attached malleable iron pinchers, into which are riveted corrugated steel grips. Warranted not to slip. It is a substantial and very durable implement.

Price, \$2.00

Graylawn Farm Louse-Chase

NO MORE LICE. Absolutely kills the lice on your cattle, swine, poultry, horses and sheep. Satisfaction guaranteed or money back. Used and recommended by state colleges and thousands of breeders. Safe, easy and economical to use.

Price

\$1.00 per large package
65c per medium package
35c per small package

GRANDIN'S

Perfected—Proven In Every Way



GRANDIN'S BABY CHICK STARTER

is well known because of the large amount of Dried Buttermilk used. The value of this ingredient is too well known to require any special comment. Yes, it is fine and velvety, the dried buttermilk makes it that way. Compare this wonderful feed by sight, touch and smell with other so-called Buttermilk Baby Chick Starters. It also contains concentrated Cod-liver Oil.

NOW YOU CAN HAVE



GRANDIN'S COMPLETE STARTING RATION

with

Dried Buttermilk—Cod-liver Oil



a feed manufactured to meet the demand of our customers who want a complete baby chick starting ration. Everything necessary and required by the baby chick is in this feed. It is made right, of the right materials, to give results. Made of purest of ingredients regardless of price. IT SAVES TIME and SAVES WORK. Provide ample feeding space and see that the chicks have at all times plenty of feed. Then watch how fast they grow. Notice their fast feather development. No Bobtailed Chickens when GRANDIN'S is fed, and they are not crowded.

RIGHT FEED BOOSTS PROFITS



GRANDIN'S BROILER MASH

with

Dried Buttermilk—Cod-liver Oil



A COMPLETE RATION

and its value has been proven for broiler raising in the battery brooder and also in the colony house. This feed will give you a two-pound chicken, nicely finished, in a short period of time, if proper care is given. Follow feeding instructions which are in each bag.

A REAL TURKEY FEED



GRANDIN'S BABY POULT STARTER

with

Buttermilk—Cod-liver Oil



A COMPLETE RATION

for giving the baby poults a real healthy, vigorous start in life. With this feed you will have a TURKEY before you know it. If you want to raise every livable poult into a sturdy, profitable bird, use GRANDIN'S from start to finish.

GRANDIN'S

Perfected—Proven In Every Way

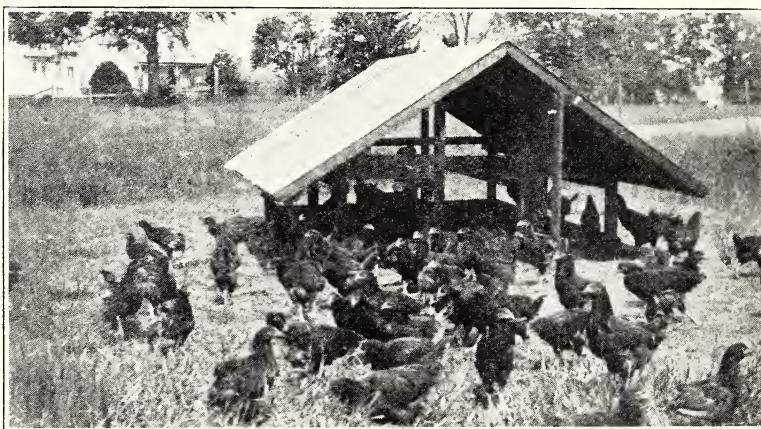


GRANDIN'S GROWING MASH

with Dried Buttermilk

keeps the chicks growing vigorously right along. It gives uniform and normal development and early egg production, but with good body weight and full maturity. Also a good-sized egg which is so essential to larger profits. The growing period is a building period, the value of the pullet or cockerel is largely determined by the care and feed given during this period. You can't go wrong when you insist on GRANDIN'S GROWING MASH.

GRANDIN'S GROWING MASH is also manufactured with Concentrated Cod-liver Oil added.



Pedigreed S. C. Rhode Island Red Pullets at F. M. Piper's, Rockland, Me. No males used at this place unless dams have made a record of 200 eggs or more. GRANDIN'S FEEDS used for five years.



GRANDIN'S LAYING MASH

with Buttermilk



the superior laying mash. This Laying Mash does not force egg production, but they lay because they are given the right food to manufacture eggs with. It also keeps them healthy and vigorous.

GRANDIN'S LAYING MASH is also manufactured with Concentrated Cod-liver Oil added.

GRANDIN'S BABY CHICK FEED

and

GRANDIN'S INTERMEDIATE CHICK FEED

are always clean and free from fine material, dust and hulls. Composed of Cracked Corn, Wheat and Hulled Oats. That's All.

GRANDIN'S SCREENED SCRATCH FEED

is clean, sweet and wholesome, made of the highest quality grains and mixed in the right proportion to produce the best results.

"PRACTICAL TESTS PROVE GRANDIN'S QUALITY"



ARBOLA

The Disinfecting White Paint

THE POWDER OF MANY USES

ARBOLA is a white paint and powerful disinfectant combined in powder form. It is ready to use as soon as it is mixed with water. It can be easily and quickly applied to building interiors with brush or spray pump. Disinfects and dries pure white. Does not flake or peel off. *One pound covers 100 sq. ft.*

ARBOLA makes buildings light, clean, sweet-smelling and sanitary. Helps to prevent contagious diseases among live stock and to keep poultry, cattle, horses, etc., free from lice, mites and other parasites. Recommended by leading agricultural colleges, experiment stations and health authorities for use in poultry houses, stables, dairies, hog pens, cellars, garages, dog kennels, rabbit hutches, factories, warehouses, out-buildings, on trees and tree trunks, and in the garden.



IN THE BARN

To paint and disinfect side walls, ceilings, stalls, etc., as an aid to cleanliness and prevention of tuberculosis, foot and mouth disease, and other contagious diseases. Spread the dry powder on floor where the cow stands. Use it as a louse powder. Wash hands with powder before milking.



IN THE HOUSE

ARBOLA applied to walls and ceilings of cellars will kill bad odors, mustiness, prevent cobwebs, disease germs, drive out spiders, ants and other insects. Use the dry powder as cleanser for pots, pans, cutlery and for removing stains from woodwork. Especially recommended in bathroom for cleaning bathtubs, wash basins, tile and for disinfecting the bowl.

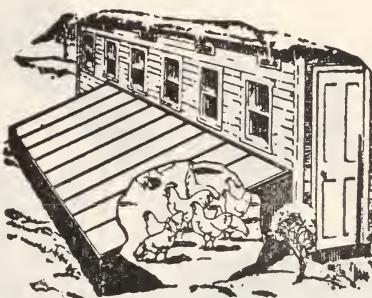
Dust **ARBOLA** on rose bushes, peas, cabbage, tomato plants, etc., to help get rid of insects and worms. Spray it on trees and tree trunks.

It increases light, sanitation and general appearance in factory buildings. It makes cleaner warehouses. An excellent and economical interior finish for garages.

PRICES

5 pounds (5 gallons)	\$.75
10 pounds (10 gallons)	1.25
50 pounds (50 gallons)	5.00
200-pound bags, \$18.00	

Flex-O-Glass



MUCH CHEAPER THAN GLASS

FLEX-O-GLASS is a strong fabric treated by a patented process to make it transparent, weather-proof and water-proof. It costs much less than glass and for many purposes is superior. Anyone can put it up. It admits abundant light which it diffuses and scatters to all parts of the enclosure. It comes in rolls 36 inches wide and any length.

The popularity of **FLEX-O-GLASS** has been sensational.

HUNDREDS OF USES

FLEX-O-GLASS is ideal for such things as windows of poultry and hog houses and barns, for scratch sheds, brooder houses, hot beds, cold frames, storm windows and doors, winter enclosures for porches and sleeping porches, etc. Used in new buildings saves expense of glass and costly sash. Cheap and handy for repairs.

LET VIOLET RAYS THROUGH

FLEX-O-GLASS readily transmits the life-giving vitalizing ultra-violet rays of the sun. (Glass stops them.) These are the health rays of sunlight and are absolutely needed by poultry in winter months. **FLEX-O-GLASS** sheds a warm, soft, even light full of violet rays to all parts of the enclosure.

PRICES

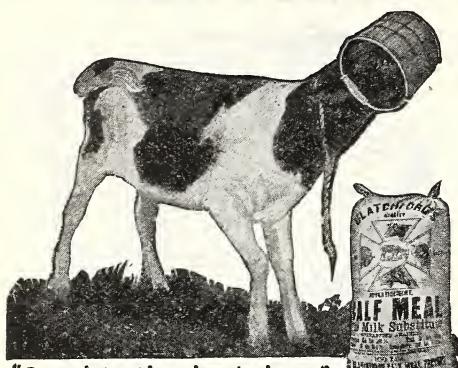
1 to 10 yds.....	\$.40 per yd.
10 to 15 yds.....	.35 per yd.
15 yds. and over.....	33 1-3 per yd.

Sulphur Fumigating Candle

The candle is made from pure, high grade sulphur, and has a circular wick, which, when lighted, stays lighted. Is especially useful to poultrymen in ridding poultry houses of insect pests, as the vapor from it penetrates crevices not reached by other means.



In circular tin box, price, 15 cents.



"Good to the last drop"

Blatchford's Calf Meal

THE COMPLETE MILK-EQUAL

Just the thing to raise your calves right from birth.

Then sell your milk and get the benefit of the high creamery prices.

No more scouring calves.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion. Will push calves forward better and quicker than any other food.

Sold in 100, 50 and 25 pound bags.
100 POUNDS MAKES 100 GALLONS OF COMPLETE MILK-SUBSTITUTE

Trade BUELL—BOSTON Mark

Dried Skim Milk

A dairy produce that complies with all Federal and State Pure Food Laws, and is suitable for Poultry, Livestock or Household use.

Fed to growing chicks, Dried Skim Milk stimulates growth and maintains health by supplying the necessary animal protein in the mash.

Fed to laying hens, it aids digestion, prevents coc-

cidiosis, and increases the yield of eggs while reducing the cost in feed of producing the eggs.

Because of its quality it is the favorite with dairy-men who breed and raise good calves.

Write for prices and circular giving directions for feeding. Put up in 100-lb. bags and 140-lb. barrels.

MOISTURE AND DAMPNESS IN POULTRY HOUSES ARE EXTREMELY DANGEROUS!

THINK IT OVER CAREFULLY

A Poultry House No Matter How Clean, Disinfected and Sanitary is Dangerous if Damp.

Moisture and Damp Houses are Enemies of the Poultryman.

A Dirty Dry House is Safer than a Clean Damp House.

A CLEAN DRY POULTRY HOUSE IS IDEAL

Peco Peat Moss is a powerful absorbent, as it readily takes up from ten to fifteen times its own weight in water. The usual litter, such as straw or shavings, has very little, if any, power of absorbing moisture. Universal Peco Brand being a wonderful insulator, will prevent harmful effects that cold floors have on your birds.

There Is No Better Litter Available Than Peco Peat Moss.

UNIVERSAL PECO BRAND PEAT MOSS POULTRY LITTER BETTER BY FAR AND MUCH CHEAPER THAN STRAW, SHAVINGS OR ANY OTHER LITTER FOR POULTRY HOUSES.

There Is No Better Peat Moss Available.

1. It is carefully graded, free from silt or dirt, therefore, the bales are lighter in weight.
2. It is thoroughly dried before packing, insuring more PEAT MOSS for the weight; covering more floor space.
3. It is securely, tightly baled and wrapped in burlap, insuring good condition upon arrival to any point.
4. Each Bale covers from 85 to 90 square feet, 4 inches deep.

Use Universal Peco Brand Peat Moss in Your Poultry Houses and Barns and have Dry Quarters for Your Stock. Comfortable, Contented, Healthy Stock Make Profitable Stock. For Poultry Use Two to Four Bales a Year Spread on the Floor for each 100 Birds. Grades also for Horse and Cattle Bedding. For Horses and Cattle a Bale Per Week for Seven Animals.



Poultry Feeds of Many Kinds

BUTTERMILK BABY CHICK FOOD	INTERMEDIATE SCRATCH FOOD	DRIED SKIM MILK
CHICK SCRATCH FOOD	GROWING MASH	LARGE SCRATCH FOOD
GROWING MASH	LAYING MASH	ALFALFA
DRIED BUTTERMILK	MEAT SCRAPS	FISH MEAL
POULTRY BONE		OYSTER SHELLS
GRIT (fine, medium, coarse)		CHARCOAL (fine, medium, coarse)
COD LIVER OIL		GOLD LEAF TOBACCO POWDER



Roup White Diarrhoea Canker

B-K FED IN DRINKING WATER KILLS THE GERMS

NO POISON—CLEAN

The new and better way to prevent poultry diseases. Based on sound principles of disease prevention of birds, animals and people. This was proved by war experience. Leading poultrymen and authorities recommend it.

ASK FOR BULLETIN 213

1 quart	\$ 1.25
1 gallon jugs	3.00
5 gallon jugs	12.50

SUCCESSFUL FOR NEARLY FIFTEEN YEARS

Manufactured only by



GENERAL LABORATORIES

MADISON, WISCONSIN

Cod Liver Oil

FOR POULTRY, LIVE STOCK AND DOGS

The effect on poultry and live stock is immediate and noticeable. Leg weakness, "runts" and soft shelled eggs are eliminated. Chick mortality, hen mortality and blood spots are reduced. Egg production, fertility, hatchability and livability are increased.

Write for prices

Evendrip Mixer

FOR MIXING COD LIVER OIL WITH POULTRY FEED

The EVENDRIP will apply oil in any desired proportions ranging from 1-10 per cent. to 4 per cent.

It is made in two sizes. The small size oils 100 lbs. of feed in 5 minutes, the large size oils 100 lbs. of feed in 2 minutes.

PRICES:

Small Size.....\$21.50 Large Size.....\$33.50

CEL-O-GLASS



Cel-O-Glass Poultry Houses

are Health Houses

On Cold Frames and Hot Beds: 10% to 15% higher temperatures are averaged under Cel-O-Glass sash than under ordinary sash, and plants are ready one to two weeks earlier than when grown under ordinary conditions. Cel-O-Glass sashes are easy to handle, are light in weight, and cannot shatter in bad weather.

On Porches, Storm Doors and Storm Windows: Cel-O-Glass makes health porches out of ordinary porches, keeps homes warmer in winter and saves fuel bills. Cel-O-Glass storm doors and storm windows do not break in bad weather and keep interiors warm.

CEL-O-GLASS BRINGS ULTRA-VIOLET

RAYS INDOORS IN WINTER

In Poultry Houses: Cel-O-Glass in poultry houses brings poultry health to chicks, layers and breeding stock. Keeps houses warmer and drier. Brings indoors the vitalizing ultra-violet rays which kill bacteria, prevent the spread of disease and increase egg production.

That Cel-O-Glass increases winter egg production is suggested by the record of the past four years at the Vineland Egg-Laying Contest. An increased laying average of 34 eggs per bird since Cel-O-Glass was installed is the record at this famous poultry event. Multiply the number of your layers by 34 and see what a similar experience would mean to you.

Cel-O-Glass comes in rolls, 100, 50 and 25 ft. long and 36 inches wide. Any size or length can be cut from the roll.

PRICES

Full Rolls,	13½ c, sq. ft.
Cut Lengths,	15 c, sq. ft.

Ice Tools

Everything in ice harvesting tools and supplies for ice men, dairymen and farmers. Complete illustrated catalog sent upon request. Write us for pamphlet, "How to Harvest Ice."



BAR CHISEL

BREAKING BAR



SPLITTING FORK

ICE SHAVER



SPLITTING CHISEL

ICE SAW



LINE MARKER

ICE HOOK

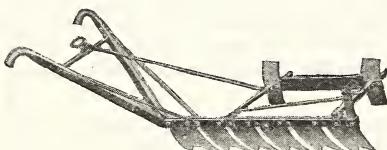


ICE HOOK

RING HANDLE
SPLITTING CHISEL

TONGS

"Ice King" Plow



The "Ice King" plow is designed upon scientific principles, and has been accepted as the most economical and practical on the market. The teeth are made of the finest quality crucible tool steel carefully heat treated to maintain a keen cutting edge. Number 321 cuts 10 inches. Has five cutting teeth and clearing tooth, and is equipped with patent adjustable swing guide, drilled to mark ice 14, 16, 18, 20, and 22 inches. These plows are filed with a feed to cut $1\frac{1}{2}$ inches. A horse in four runs at a pace of three miles per hour would cut the equivalent of a groove 6 inches deep and 66 feet long in one minute, thus equaling the sawing capacity of fifty men in 12-inch ice for the same time. The "Ice King" will therefore save its cost in a short time. Price \$60.00.

Massey-Harris No. 6 Cream Separator

Electric or Hand Power

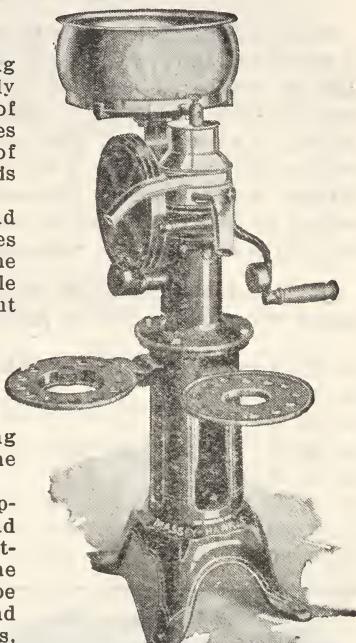
BUILT IN SEVERAL SIZES

Even the smallest globules of butter fat are saved when separating with this machine. It has an improved bowl which gives practically perfect separation regardless of the temperature of the milk or of the density of the cream that is being run. Indeed, so closely does it skim, it is not at all unusual to find less than one hundredth of one per cent. of butter fat in the skim milk and oftentimes it is difficult to detect even a trace.

The gears are held in positive alignment by a one-piece frame and have diagonal teeth cut from the solid by special automatic machines which make them absolutely correct as to pitch and mesh. For the worm wheel, phospher-bronze, a metal which develops very little friction when running in contact with steel, is used. An efficient splash system of oiling keeps the gears well lubricated.

Both the spindle and the bowl are made as separate pieces and are so designed that the latter can be removed without disturbing the former. This construction facilitates the washing of the bowl in that you do not have to handle the spindle with it, and besides, when returning it there is no chance of springing the spindle and getting the bowl out of balance or of damaging the worm or worm gear.

All of the weight of the spindle, the bowl and the milk being separated is carried on a steel ball on which the spindle stands and which is mounted in a phospher-bronze bearing. A simple adjustment is provided in the bearing for regulating the height of the bowl, and a removable, hardened steel toe, which can easily be replaced if it should ever become worn, is fitted into the lower end of the spindle. As the steel ball revolves when the spindle turns, friction and wear are minimized. A bell indicator enables the operator to know whether or not he is turning the machine at the correct number of revolutions per minute.



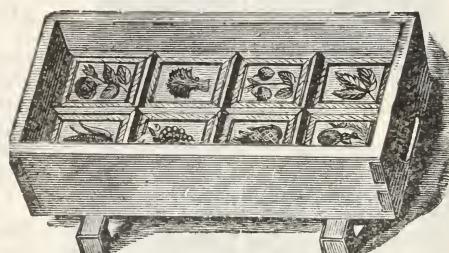
Equipped as a Straight Hand Machine

Combination Butter Mould

These moulds are expressly designed to meet the demand for strictly first-class, hand-carved designs.

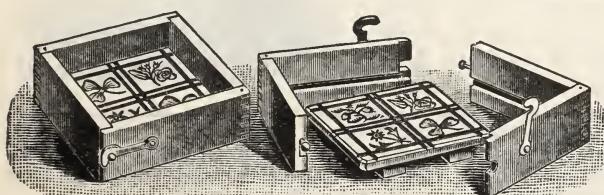
The cut here shown represents No. 6, which holds two pounds, and is divided into eight $\frac{1}{4}$ -pound cakes.

Prints engraved to order, with ordinary designs, initials or monogram, without extra charge, excepting that, should more than six letters be wanted on each cake, a charge of five cents per letter will be made for each letter in excess. Prices quoted on application for special or complicated designs or lettering.



No. of Prints	No. of Cakes	Capacity in Pounds	Capacity of Each Cake in Ounces	Dimensions of Moulds in Inches	Dimensions of Each Cake	Price
2	4	2	8	11 x 3 $\frac{3}{4}$	3 $\frac{3}{4}$ x 2 $\frac{3}{4}$	\$8.50
3	4	2	8	12 x 3	3 x 3	8.50
4	4	1	4	4 $\frac{1}{2}$ x 5	2 $\frac{1}{4}$ x 2 $\frac{1}{2}$	7.75
5	4	1	4	10 x 2 $\frac{1}{2}$	2 $\frac{1}{2}$ x 2 $\frac{1}{2}$	8.50
6	8	2	4	10 x 4 $\frac{1}{2}$	2 $\frac{1}{4}$ x 2 $\frac{1}{2}$	9.75
10	24	1 $\frac{1}{2}$	1	10 x 4	1 $\frac{1}{4}$ x 1 1-3	12.00
20A	4	2	8	10 x 3 $\frac{1}{2}$	3 $\frac{1}{2}$ x 2 $\frac{1}{2}$	8.50

By mail add 10c.



Blanchard Butter Mould

$\frac{1}{2}$ lb., two $\frac{1}{4}$ lb. prints, 75c.; by mail, 82c.; 1 lb., four $\frac{1}{4}$ lb. prints, 85c.; by mail, 92c.; 2 lbs., eight $\frac{1}{4}$ lb. prints, \$1.35; by mail, \$1.42.

If engraved with initials, or any hand carving, add to the REGULAR PRICE 25 cents for each cake so engraved.

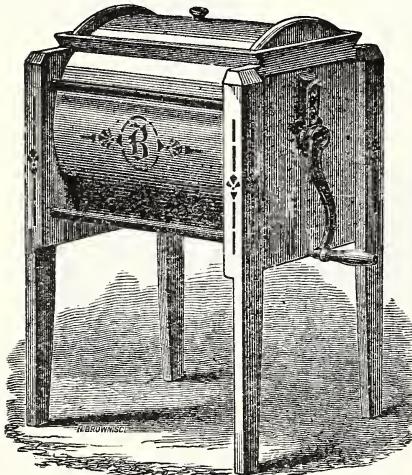
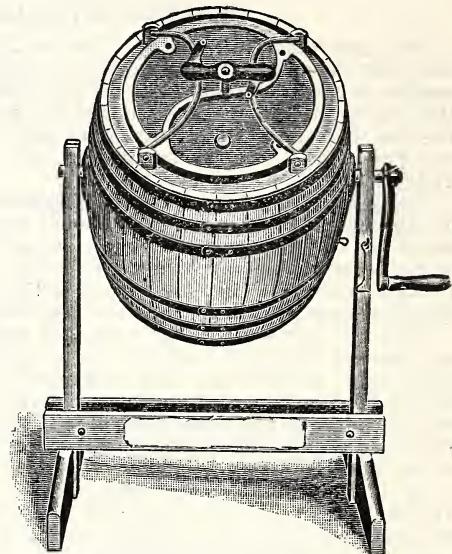
The Belle Churn

One of the Best Barrel Churns Made

This churn is made in the most thorough manner and of kiln-dried white oak. It will last for years. The principle is concussion and not friction—has no floats or paddles inside. It is easily operated and easily cleaned. Perfect in construction, and having no parts liable to break or get out of order, it fully meets the requirements of large or small dairies. Be sure and get a churn large enough so that it will not be necessary to fill over half full, less is better, if you wish good work.

Single and double pulleys and pulley shafts can be furnished if desired to run by power.

	Price
No. 0, 6 gal., churns 1 to 3 gals. cream.....	\$ 7.50
No. 1, 10 " " 1 " 5 " "	8.25
No. 2, 15 " " 1 " 7 " "	9.25
No. 3, 20 " " 2 " 9 " "	11.00
No. 4, 25 " " 2 " 12 " "	12.75
No. 5, 35 " " 3 " 16 " "	15.00
No. 6, 60 " " 6 " 22 " " with frame	31.25
No. 6, 60 " " 6 " 22 " " no frame	26.25



The Blanchard Churn

The following are the leading merits of the Blanchard Churn:

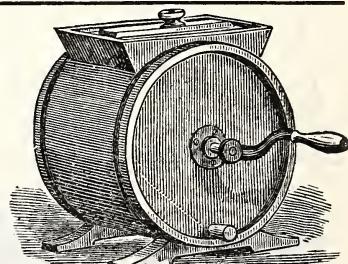
Perfect quality of all materials used. Excellency of manufacture. Simplicity of construction, having no cog wheels or gearing. Durability. Ease of operation. The action of the dasher is such as to cause agitation of the cream by creating currents, and not by beating or by friction of the cream, which may injure the grain of the butter. Facility in removing the dasher and getting at the butter. Ease of cleaning, the form of construction making the inside without any inaccessible or invisible angles or corners.

	Price
No. 3, for up to about 2 gallons of cream.....	\$10.00
No. 4, " " 4 " "	11.75
No. 5, " " 6 " "	13.50
No. 7, " " 16 " "	20.00

Cylinder Churn

A favorite style of churn which has been in use for many years.

	Price
No. 1, capacity 2 $\frac{1}{4}$ gallons.....	\$4.25
No. 2, " 4 "	5.25
No. 3, " 7 "	6.00
No. 4, " 10 $\frac{1}{2}$ "	6.75



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Reid's Patent Butter Worker

These machines are all built of the best material.

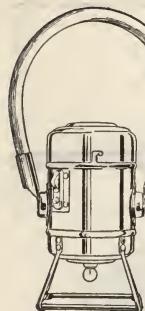
The iron part is galvanized, preventing rust.

No.	Size	Depth Inside	Capacity	Price
1.	23x36 in.	2 $\frac{1}{2}$ in.	50 lbs.	\$23.75
2.	20x36 in.	2 $\frac{1}{2}$ in.	30 lbs.	20.50
3.	17x27 in.	2 $\frac{1}{2}$ in.	20 lbs.	17.50
4.	14x23 in.	2 $\frac{1}{2}$ in.	10 lbs.	15.00

Three pounds can be worked in any of the above machines, as well as a larger quantity. In buying a worker you should choose a size that will work the largest quantity that you will be likely to want to work at a time.



RAY-O-VAC ELECTRIC LANTERN



The new Ray-O-Vac Electric Lantern is ruggedly constructed of solid brass. Handle (of bent wood) is the swing type. Legs are solid, sturdy. Highly polished, nickel-plated finish. Connections are non-short-circuiting, insuring dependable service. Switch for either intermittent or steady light. Serves as a lantern or may be stood on end or side as a candle without rolling.

Used by railroad switchmen and conductors, tourists, fishermen, campers, car owners, trouble shooters, wagon drivers, boatmen, bus and van drivers, miners and others. Ideal for general home use. Burns 50 hours.

Price with battery.....\$4.00
Price of battery..... .50

Ray-O-Vac Standard and

Rotomatic Flashlights

Flashlight Batteries and Lamps

PRICES COMPLETE

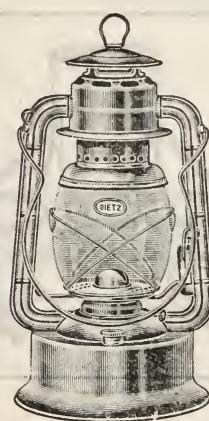
No. 6A, 2 No. 2 cells, clear bulls eye lens	\$.95
No. 5, 2 No. 1 cells, focusing spotlight, 400 ft. beam.....	1.25
No. 7, 2 No. 2 cells, focusing spotlight, 500 ft. beam.....	1.50
No. 8, 3 No. 2 cells, focusing spotlight, 700 ft. beam.....	1.95
No. 11, 2 No. 2 cells, focusing spotlight, 500 ft. beam.....	2.00
No. 11 has Rotomatic switch which prevents accidental lighting.	



Dietz Lanterns and Driving Lamps

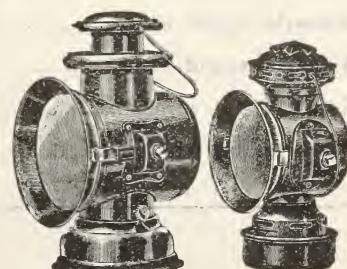
Since Dietz introduced the original tubular lantern, nearly a half century ago, notwithstanding the fact that many inferior imitations have appeared, these manufacturers still enjoy the reputation of having the largest output of lanterns of any concern in the world, the goods holding their place by reason of their absolute merit, for they fill to perfection every requirement for which a lantern or lamp may be intended.

That it may not be forgotten that "Dietz" lanterns are "different" from a host of others, each lantern of the Dietz standard pattern will be tagged with a yellow quality tag bearing the Dietz trademark.



Can't Spill Oil, Can't Blow Out.

"Wizard" Lantern



Driving Lamps

We have in stock a full line of all the leading patterns. Prices furnished on application.

Prices furnished on application.



Milk or Cream Bottles

Refuse to receive milk in any other than glass bottles, as it is the only way by which you can get milk that is sweet and pure and that has not come in contact with the numberless street odors, flies, and many other undesirable influences.

The "COMMON SENSE" Bottle, capped by a strong, clean paper cap, is the BEST, as it can be washed absolutely CLEAN, and no taint is possible in milk put up in these bottles.

Per Doz.

$\frac{1}{2}$ pint, Common Sense..... \$.65
1 pint, Common Sense..... .80

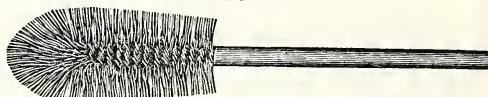
1 quart, Common Sense..... 1.00

Made in two sizes—No. 1 taking a cap $1\frac{1}{8}$ inches in diameter, and No. 2 a cap $1\frac{1}{8}$ inches in diameter.

Special prices on five or ten gross lots.

Brushes

No. 86



No. 61



Cover Spout Brush



We are in a position to furnish the best kind of brushes for dairy use, and recommend especially our line of can, separator and bottle brushes.

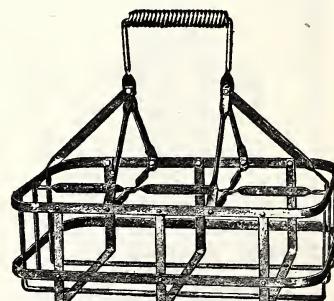
Separator Bowl	50c.; by mail, 57c.	||	Bottle Brushes, No. 61..... 45c.; by mail, 50c.
Separator Tube	20c.; " " 23c.	||	" " No. 86..... 70c.; " " 75c.
Separator Cover Spouts.....	20c.; " " 23c.	||	Test Bottle 10c.; " " 13c.

Milk Can \$1.00; " " \$1.08

Special Prices for Large Quantities

Milk Bottle Carriers

4-quarts, round wire	\$1.35; by mail, \$1.43
6-quarts, round wire	1.35; " " 1.45
8-quarts, round wire	1.65; " " 1.75
6-quarts, flat wire	1.65; " " 1.75
8-quarts, flat wire	2.00; " " 2.15



Bottle Boxes

For carrying bottles on the delivery trucks. Made of hard wood with wire divisions. One quart size holds twelve bottles, one pint size holds twenty bottles.

Strapped on ends, \$2.50 each; by mail, \$2.70; plain, \$1.75 each, by mail \$1.95

Farm
DisinfectantDairy
Sterilizer

The powerful, clean, non-poisonous germ killer. The new and better way to sanitation. Based on sound scientific principles proved by war experience.

STERILIZES

Milking Machines
Pails, Cans
Strainers, Cloths

PREVENTION AND TREATMENT OF
Calf Scours,
Retained Afterbirth
Abortion

Ask for Bulletins on These Subjects

1 gallon jugs, - - - - -	\$ 3.00
5 gallon jugs, - - - - -	12.50

SUCCESSFUL FOR NEARLY FIFTEEN YEARS

Manufactured only by

GENERAL LABORATORIES,

Madison, Wis.



BUTTER CARRIERS



These carriers are made of spruce and white wood and are very strong and durable, with trays so arranged that the butter is not marred in the least in handling. The ice box is made of metal, and has two compartments, the top for ice and the bottom for water as the ice melts, so that the ice is melted by air alone, thereby lasting much longer than if the ice rested in the water.

Each carrier is filled with long trays, and the capacity given is for prints of the standard creamery size.

Size	No. Trays	Without Ice Box	Price	By Mail
12 lbs.	4	10 1/4 x 7 3/8 inches, 1 1/8 inches deep, inside measure	\$3.25	\$3.45
24 "	4	10 1/4 x 14 5/8 "	4.00	4.25
32 "	4	10 1/4 x 18 1/2 "	4.25	4.55
40 "	5	10 1/4 x 18 1/2 "	5.00	5.35
48 "	6	10 1/4 x 18 1/2 "	5.50	5.85

Price, complete, with both long trays, and ice box and short trays for summer use.

24 lbs. (holding 16 lbs. butter, with ice attachment), \$5.75. By mail, \$6.10.

32 lbs. (holding 24 lbs. butter, with ice attachment), \$6.00. By mail, \$6.35.

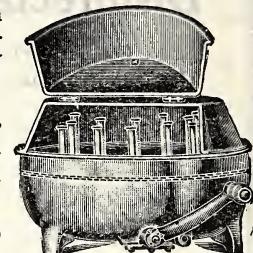
40 lbs. (holding 32 lbs. butter, with ice attachment), \$6.75. By mail, \$7.20.

48 lbs. (holding 40 lbs. butter, with ice attachment), \$7.25. By mail, \$7.70.

The 12 lb. carrier, being very small, cannot be fitted with ice box.

The "Facile" Improved Babcock Milk Tester

The "Facile" Tester has taken the lead over all other Babcock machines, not only among creameries and cheese factories, but in state experiment stations and dairy schools. Several attempts have been made to copy the machine, but so far nothing has been produced embodying all of its desirable features, and it remains today the leading Babcock machine.



Prices include full set of glassware, comprising test bottles, pipette and acid measure; also test bottle brush and bottle of acid.

6 bottles, \$19.25 || 10 bottles, \$21.00
8 bottles, 20.50 || 12 bottles, 22.00

The "Facile" Junior Babcock Milk Tester

The tester is similar to the above, but does not have the bottles inclosed in the metal case.
2 bottles \$9.00 4 bottles \$10.00

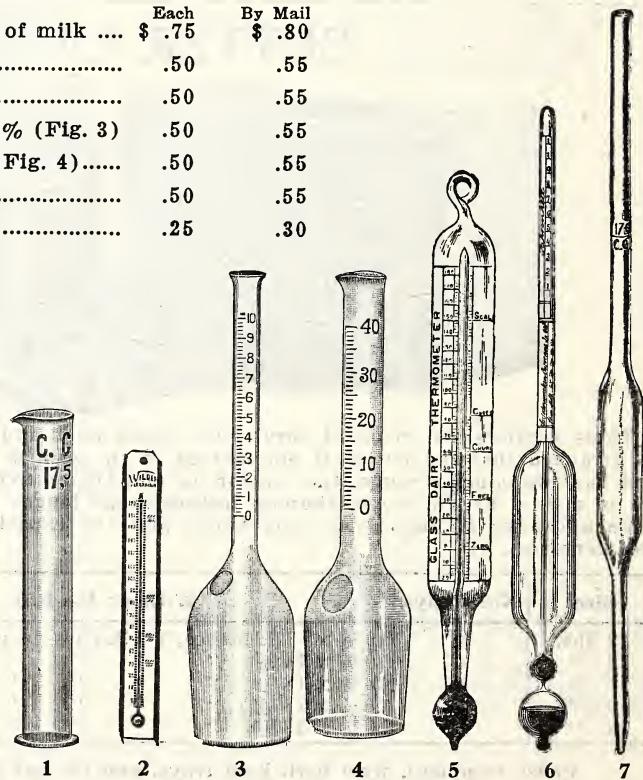
Glassware for Babcock Test

	Each	By Mail
Lactometer (Fig. 6), for testing quality of milk	\$.75	\$.80
Floating Dairy Thermometer (Fig. 5) .....	.50	.55
Flange Dairy Thermometer (Fig. 2) .....	.50	.55
Babcock Test Bottles (for milk), 10 to 50% (Fig. 3) .....	.50	.55
Babcock Test Bottles (for cream), 50% (Fig. 4) .....	.50	.55
Pipettes (Fig. 7) .....	.50	.55
Acid Measures (Fig. 1) .....	.25	.30

Acid for Babcock Test

This acid is put up expressly for making Babcock tests, in 1 quart bottles, 1 gallon bottles or in carboys.

PRICES ON APPLICATION



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."



Milk Bottle Caps

No. 1, 1 $\frac{1}{8}$ inches in diameter, plain or printed caps, 50c. per 1,000. By mail, 60c. In cases of 5,000, \$2.45 per case. By mail, \$2.70.

No. 2, 1 $\frac{5}{8}$ inches in diameter, and No. 3, 1 $\frac{3}{4}$ inches in diameter, plain or printed caps, 48c. per 1,000. By mail, 58c. In cases of 5,000, \$2.35 per case. By mail, \$2.60.

Special price on barrels containing 50,000 caps. Caps with lip, 4c. per 1,000 extra.

Caps with special printing made to order.

Wyandotte Dairymen's Cleanser and Cleaner

A powder especially compounded for use in the dairy and creamery for washing all dairy utensils, glass and tin ware, in a most satisfactory and sanitary manner. The use of this powder means absolute cleanliness. Price, 5 lb. bags, 40c.; by mail, 52c.; 80 lb. kegs, \$4.93; 280 lb. barrels, \$13.80.

Wells & Richardson Co.'s Dandelion Brand Butter Color

PURELY VEGETABLE

Will not become rancid. Will not color the buttermilk. Gives a bright June color. Always gives satisfaction.

PRICE

Small size, to color about 375 pounds, \$.35;	by mail, \$.42
Medium size, to color about 750 pounds, .65;	" " .72
Large size, to color about 1875 pounds, 1.00;	" " 1.10
Cans, 1 gallon	4.50; " " 4.75



Hansen's Danish Rennet Tablets

Always of the same strength, entirely preservable, separates the cheese matter completely, and gives the greatest quantity possible.

Price—Package of 24 tablets, 85c; by mail, 88c.

Hansen's Danish Butter Color

The Most Uniform, the Purest and the Most Natural Shade

Made with the finest imported vegetable oil.

To butter makers desiring a pure vegetable butter color, we do not hesitate to recommend Hansen's Danish as unquestionably the best in every respect.

Its high quality has never been approached by any competing preparations, and many shippers of the finest butter demand its exclusive use by their butter makers.



Price List

Small size, to color about 400 lbs.,	\$.35;	by mail, \$.42
Medium size, to color about 1000 lbs., ....	.70;	" " .75
Large size, to color about 2000 lbs.,	1.10;	" " 1.20
Cans, 1 gallon	4.50;	" " 4.75

The Horne Vertical Can Strainer

Is warranted to filter milk free from the slightest trace of sediment as fast as poured.

The milk begins to filter quickly and evenly in all directions the instant it is poured, and because of the vertical construction and large filtering area of the strainer there is no back pressure; consequently, all foreign matter is caught on the vertical sides, and not forced into the milk.

Made of heavy charcoal tin, all inside joints thoroughly soldered and no angles for accumulation of filth.

Price of strainer, complete \$2.50; by mail, \$2.62
Price of filtering flannels, each25; " " .28

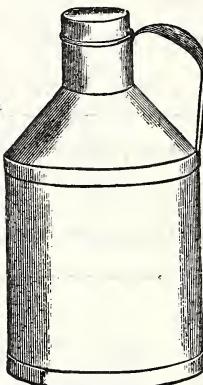


Milk Cans

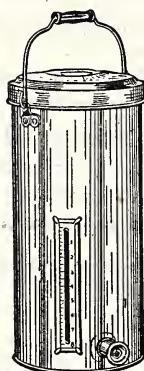
We can furnish tin, wood stopper Milk Cans, in any style, size or quantity; also 20 quart and 40 quart Shipping Cans, with either tin stopper or lock cover. The parts of all our Shipping Cans are made of steel and heavily tinned by the hand-dipping process after they are formed. Prices Furnished on Application.



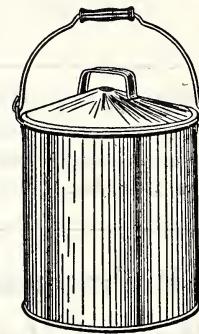
New York Shipping
Can, 20 and 40 Quarts



Milk Can



"K. & W." Can



Cream Pail



Lock Cover Shipping
Can, 20 and 40 Quarts

Cream Pails and Creamery Cans

Imperial Cream Pail, made like the "K. & W." Creamery Can, but

without faucet or glass,

\$1.75 each; by mail, \$1.90

6 Gallon Cream Pail, like cut,

3.50 each; by mail, 3.67

10 Gallon Cream Pail, like cut,

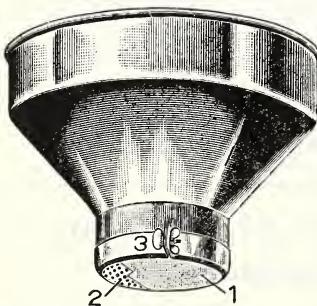
5.00 each; by mail, 5.25

"K. & W." Creamery Can,

2.50 each; by mail, 2.65

Horne's Seamless Milk Strainer

The Problem of Straining Milk as Fast as Poured and at the Same Time Remove Every Particle of That Fine Sediment Has Been Solved by HORNE'S Patented Process.



Why does milk strain in less than one-half the time by the Horne process? It is because all straining surface is OUTSIDE the outlet (see figure 1), making it impossible for the material to be forced into the perforations (see figure 2). The same material clamped between perforated metals inside the strainer will not strain milk freely, for the reason that after the first few pails are poured the material expands and must go where there is least resistance, which is, of course, into the perforations. This explains why you are having all kinds of trouble in not having your milk strained rapidly.

Sediment tests by the Horne process are warranted to be satisfactory to the most exacting health board, which is of the utmost importance in producing clean milk. The Horne process exactly reverses the method of straining milk (see figure 1) for the reason that the filtering pad is clamped OUTSIDE all perforations. This increases the actual straining area more than 100%, does not increase its diameter and every drop of milk must be strained absolutely clean. The last pail is warranted to strain as freely as the first.

Horne's combination filtering pads for which patent is pending, are composed of 7-inch square or round (6-inch if desired) absorbent cotton, reinforced on both sides with cheese cloth, making it impossible for the cotton to roll or separate. Absorbent cotton is admitted to be the ideal material for straining milk, but the great problem has been to have it properly adjusted between clamps, so as to avoid clogging or leakage.

PRICES

Combination Pads, 7-inch

60 to box \$.75; by mail, \$.85

Combination Pads, 6-inch

60 to box .65 " " .75

Plain Cotton Pads, 7-inch

(Same as you are using)

60 to box .55 " " .65
300 to box 2.25 " " 2.35

Plain Cotton Pads, 6-inch

60 to box .50 " " .60

300 to box 2.00 " " 2.10

Strainer Clamps

Any size \$.50; by mail, \$.55

12-Quart Strainer, complete

2.50 " " 2.65

18-Quart Strainer, complete

3.25 " " 3.40

Champion Milk Cooler and Aerator

A perfect aerator, removing all flavors arising from excessive cabbage, turnip or silo rations.

A complete deodorizer, removing the animal heat or cowy taste and all odors arising from the absorption by the milk of stable or other unpleasant gases.

A thorough cooler, reducing the temperature of the milk in one minute nearly to the temperature of the cooling medium.

It is equally well adapted to the use of any cooling medium, either running water, ice water, or, if a very low temperature is not required, ordinary well or spring water.

No.	Capacity of Milk Receiver	Size of Dairy	Takes Care of	Price
2.	18 quarts	10 to 25 cows	3 milkers	\$ 9.50
3.	34 "	25 to 50 "	5 "	11.25
4.	52 "	50 to 100 "	8 "	14.00



The Eureka Sanitary Pail

WITH REMOVABLE STRAINER

Strains Rapidly and Thoroughly

Sediment does not collect on the strainer, but passes beyond and is removed when the strainer is taken out.

Price, 14 quart, \$3.25; by mail, \$3.35.



Plain Milk Pails

1X	10 qt.	.....	\$ .55; by mail, \$.70
1X	12 qt.	.....	.60; " " .75
1X	14 qt.	.....	.65; " " .80
2X	10 qt.	.....	.65; " " .80
2X	12 qt.	.....	.85; " " 1.00
2X	14 qt.	.....	1.00; " " 1.15

THE NEW DOVER

Sanitary Milk Pail

The Best Milking Pail on the Market

Note the guard, which absolutely prevents dirt from falling from the rounded breast into the pail.

The body is in one piece, has only one seam, and the pail is made of extra heavy, high grade charcoal tin plates. Every seam and crevice is smoothly soldered inside and outside, preventing dirt collection and making cleaning easy.

Many dairymen do not like to pour from a pail on the side which they milk in, on account of more or less dirt and dust which is apt to be on that side of the pail. Always pour from the Dover pail in the following manner: Have the pail opening face you; grip bottom of pail under said opening and pour over the top of the breast; the guard on the breast acts as lip.

Price, \$3.00; by mail, \$3.15.



Pioneer Brand Parchment Butter Paper

Guaranteed to Contain No Oil, Grease, Paraffine or Wax

Are you getting the best price for your butter? Try wrapping it in Pioneer Butter Paper, which completely protects it from all injurious odors, preserves the delicious flavor, and prevents the prints from becoming damaged in handling.

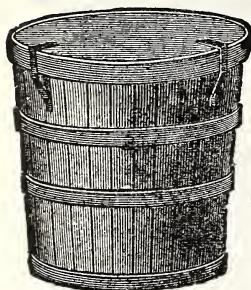
WE RECOMMEND—Before you wrap butter, wet parchment thoroughly in clean, pure water, add salt if you prefer. It means better wrapping; it means better protection.

PRINTED PAPER—Printed to comply with the law requiring the weight of the butter to be marked on the container. **SOLD IN PACKAGES ONLY.** Price, package, 7 x 9 (1/2 pound size), 5 pounds, \$1.75; by mail, \$1.88. 9 x 12 (1 pound size), 7 pounds, \$2.45; by mail, \$2.60.

Price, plain paper, 30c. per pound; by mail, 38c.

Write for quotations for large quantities and for printing special designs.





Butter Tubs

We are in a position to furnish superior spruce butter tubs in any quantity desired. Tubs are kept in stock in 10, 20, 30 and 50 pound sizes, and shipments can be promptly made. Special prices for large quantities.

Write for quotations.

Tub Cover Fasteners

Made from tin; easily applied, easily withdrawn. Tin is turned back over head of nails; impossible for nails to drop out.

1,000 in a package. Price, \$2.00 per thousand; by mail, \$2.10.

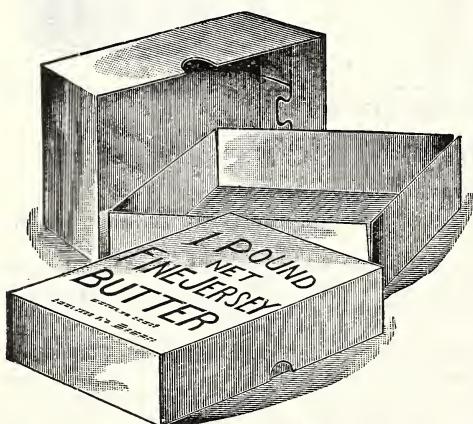
Tie Out Chains

20 ft., 65c; by mail, 75c. 30 ft., 85c; by mail, 95c.

Cow Ties

3 ft., 45c; by mail, 55c; 3½ ft., 50c, by mail, 60c; 4 ft., 60c; by mail, 70c.

4½ ft., Bull, 75c; by mail, 87c.



One Pound Folding Paraffined Paper Butter Boxes

ODORLESS AND TASTELESS

Price, \$1.40 per 100; \$12.50 per 1,000.
By mail, \$1.54 per 100.

PRICE CHANGES

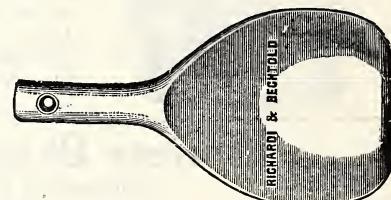
The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Oak Bail Boxes

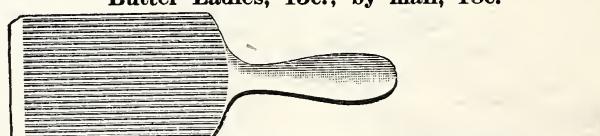


PRICE

8 qt., 95c.; by mail, \$1.05; 4 qt., 70c.; by mail, 78c.



Butter Ladles, 15c.; by mail, 18c.



Creased Butter Spades, 15c.; by mail, 18c.



Plain Butter Spades, 12c.; by mail, 15c.



Small's Calf Feeder

This is a device by which the calf may be fed away from its dam, and with any mixture of milk (or whatever else is healthful and desirable) with convenience and in the natural way, with that admixture of saliva which does not occur when calves drink from a pail.

Price, \$3.75; by mail, \$3.85

Extra nipples, 25c. each; by mail, 27c.



Rice's Weaner

For preventing calves and cows sucking themselves or each other.

PRICE

No. 1, for calves, 45c.; by mail, 48c.

No. 2, for heifers, 70c.; by mail, 73c.

No. 3, for cows, 90c.; by mail, 95c.

Kow-Kare, Garget Remedy and Bag Balm

10% More Doubles Your Dairy Profits



THE extra milk from cows always in top notch condition is money in your pocket, and KOW-KARE is the conditioner that puts it there. Insure your dairy profits for a cent a day—ask us how thousands of dairymen are doing it. As a conditioner as well as a remedy for treating serious cow troubles, KOW-KARE is indispensable.

BAG BALM, the companion remedy, is a wonderful ointment for Caked Bag Sore Teats, Cuts and Bruises.

PRICES

Kow-Kare, 65c. and \$1.25 per can; by mail, 75c. and \$1.37.

Bag Balm, 60c. per can; by mail, 65c.

Grange Garget Remedy



Positively cures garget without in any way injuring the cow.

PRICE

65c. per can.

By mail, 75c.

Cow's Relief

A standard remedy among dairymen.

A sure relief for caked udder, and will keep bag and teats free from soreness.

PRICE—Two Sizes

50c. per can By mail, 55c.

\$1.00 per can By mail, \$1.08



Ox Muzzles

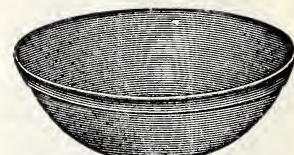
Small, per pair..... \$.65
By mail, .75
Large, per pair..... 1.10
By mail, 1.20

Cow Bells

No. 1.....70c.; by mail, 80c.
No. 2.....55c.; " " 65c.
No. 3.....50c.; " " 60c.
No. 4.....45c.; " " 55c.

Wood Bowls

Oiled



11 inch,	\$.35;	by mail, \$.45
13 "	.70;	" " .88
15 "	.95;	" " 1.10
17 "	1.60;	" " 1.75
19 "	2.00;	" " 2.25

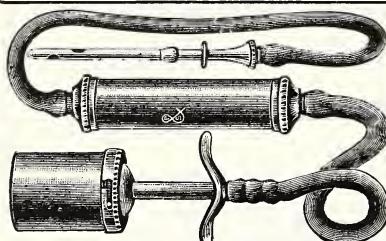
Ox Balls

Made of brass in three sizes.

Prices 10 cents to 15 cents each
By mail 12 cents to 17 cents each

Bull Rings

2½-inch copper..... 35 cents; by mail, 38 cents
3-inch copper..... 40 cents; by mail, 43 cents

**The Pilling Milk Fever Outfit**

FOR STERILIZED AIR TREATMENT

This Treatment Has Cured 97 Per Cent. of All Cases Treated.
Recommended by the Bureau of Animal Industry of the
United States Department of Agriculture.

The outfit consists of the instrument, a roll of tape, a package
of carbolized cotton and full directions.

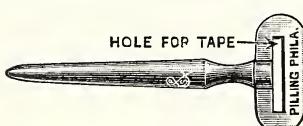
Price, \$3.00; by mail, \$3.08.

Pilling Lead Probe

With Full Directions.

For the treatment of obstructed teats, also for enlarging the opening.

Price, 30 cents; by mail, 32 cents.

**Pilling Teat Expander**

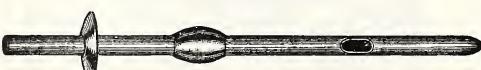
FOR HARD MILKING COWS

Price.....50 cents; by mail, 52 cents

Pilling Hard Rubber Teat Plug

Especially designed for two purposes. First, to prevent dropping of
milk in cows where there is relaxation of the little muscle at the end of the
teat and consequent leakage of milk; and secondly, to dilate the canal of
the teat above the muscle in cases where hard milking is due to contrac-
tion of this part of the canal.

Price, 50 cents; by mail, 52 cents.

**Milking Tubes**

For drawing milk from cows with sore or obstructed
teats. Made from white metal, in 2½ and 3½ inch
lengths, heavily plated with pure silver and warranted
equal to solid silver ones in every respect, at about
one-fourth the cost. Price, 25 cents; by mail, 27 cents.

Medicated Wax Teat Dilators

For obstructions, sores on end of teat, hard milkers, etc.
Price per package of 12, 25 cents.

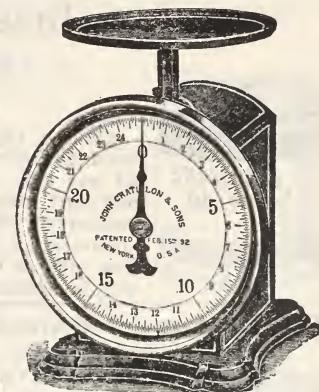


Improved Circular Spring Balance Milk Scales

USED BY MOST DAIRYMEN

Graduated on dial into 1-10 pound.

No. 270. Weighing up to 60 pounds, \$7.50; by mail, \$7.60
No. 260. Weighing up to 30 pounds, \$6.50; by mail, \$6.60



Favorite Family Scales Dial and Glass Sash, Handsomely Ornamented

The pointer may be adjusted to balance the weight of a scoop, etc., by turning the thumb-screw on top of scale.

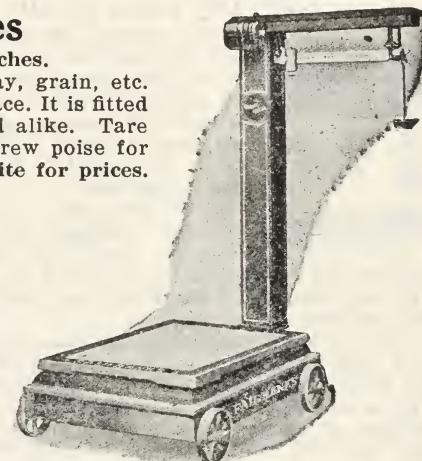
PRICE

No. 047. Complete with scoop, white dial..... \$5.75; by mail, \$5.90
No. 147. " " " tin dial..... 4.50; by mail, 4.65

Fairbanks Platform Scales

Capacity, 500 lbs. by $\frac{1}{2}$ lb. Platform, 16 by 25 inches.

This is a convenient scale for weighing cans of milk, hay, grain, etc. Being mounted on wheels, it is easily moved from place to place. It is fitted with brass arrow, double beam, both beams being graduated alike. Tare may be taken up on the lower beam. Equipped with set-screw poise for locking in place. May be had also with single beam. Write for prices.



Rat-Tox

Tasty bait and powerful poison combined. Ready to use. A nibble kills a rat. Price, 50c.

Rat-Nip

Rats and mice cannot resist it. Price, 35c.

Troubled with Rats and Mice in Your House and Barn—When

K-R-O

(KILLS RATS ONLY)

Will Rid Your Premises

Without Endangering Your Pets, Livestock, Poultry, Etc.

This wonderful new exterminator, K-R-O, is the only one of its kind on the market that is harmless to animals other than rats and mice, and fulfills a long felt want among users of rat exterminators. Price, \$.75.

RED WING POWDER



For the destruction of Roaches, Flies, Bed-Bugs, Moths, Cockroaches, Ants, Fleas, etc. Also in use for Men and Animals. Contains no Poisons or Harmful Substances. Harmless to Mankind and Animals.

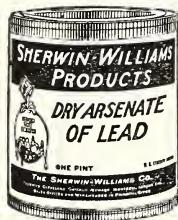
Red Wing Powder, in the round bellows, 10c. and 25c.

By mail, 15c. and 30c.

Insecticides and Fungicides

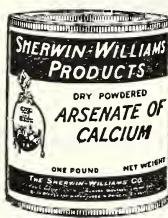
Sherwin-Williams Products

S-W Dry Powdered Arsenate of Lead



One of the oldest and most effective insecticides on the market, and can be used for spraying all kinds of fruit with perfect safety. Contains from 30 to 33 per cent. arsenic oxide thoroughly in combination with lead and less than 1 per cent. water soluble arsenic. This means unquestionable effectiveness without danger of burning foliage. S-W Arsenate of Lead is extremely fluffy, therefore covers more foliage and stays in suspension longer than most leads on the market. Can also be dusted. For general spraying 1 to 1 1/2 pounds to 50 gallons of water will be found very effective. Put up in 1 lb. and 4 lb. pkgs.

S-W Dry Powdered Arsenate of Calcium



Especially valuable as a spray to control the "potato bug" and many other chewing insects of vegetable crops. Contains more than 40 per cent. of arsenic oxide, and therefore has a killing efficiency surpassed only by Paris Green. It is more effective and economical than Sodium Arsenate as a potato spray. Considered by the United States

Department of Agriculture as a high grade Arsenate of Calcium. Use at the rate of 3/4 to 1 pound to 50 gallons of water. 1 lb., 4 lb., 25 lb., 50 lb. and 100 lb. pkgs.

S-W Dry Lime Sulfur

The original Dry Lime-Sulfur and the only one that has been thoroughly tested and approved by state experiment stations. It is also used by many of the largest fruit growers in New England. Protected by U. S. patent No. 1,254,908.

S-W Dry Lime-Sulfur is 33 degrees Beaume Lime-Sulfur Solution with the water extracted. Its use eliminates all losses due to leakage and freezing. Handling and freight costs are reduced 80 per cent.

For dormant spraying on apples, pears, plums and cherries, use from 12 to 15 pounds to each 50 gallons of water. For summer spraying of apples and pears, use 3 to 4 pounds to each 50 gallons of water. As a summer spray on plums and cherries, use 3 pounds to each 50 gallons of water. Use the customary proportion of Dry Arsenate of Lead. Put up in 1 lb., 5 lb., 10 lb., 25 lb., 50 lb., 100 lb. and 200 lb. pkgs.



S-W Fungi Bordo

A well-balanced dry Bordeaux mixture containing 50 per cent. of blue vitriol and 50 per cent. of lime. It is the only well-balanced Bordeaux prepared mixture on the market. It will not deteriorate and will give effective results.

Fungi Bordo will prevent potato blight, apple scab and other fungous diseases controlled by Bordeaux mixture.

To produce a 3-3-50 Bordeaux mixture use 6 pounds to 50 gallons of water; for a 4-4-50 formula use 8 pounds to each 50 gallons of water. Put up in 1 lb., 4 lb., 25 lb., 50 lb. and 100 lb. pkgs.



S-W Paris Green



One of the oldest and most reliable Paris Greens on the market. Its high quality is recognized everywhere, and many years of use have proven its efficiency. Very light and fluffy, insuring good suspension in the spray tank and thorough covering of the foliage. Contains approximately 56 per cent. arsenious oxide and less water soluble arsenic oxide than is allowed by the law, so carefully combined that danger of burning is reduced to a minimum. In using Paris Green conditions vary greatly, but for general purposes 1 to 3 pounds to 50 gallons of water is very satisfactory. Put up in 1/4 lb., 1/2 lb., 1 lb. pkgs.

KALCO Spreads the Spray and Makes It Stay

Kalco gives complete coverage of Lime Sulfur or Bordeaux on opening buds, unfolding leaves and blossoms. This means the greatest protection against scab, brown rot or other fungus infection. It causes the spray to dry quickly in a durable coating and enables the orchardist to get the greatest benefit from sprays that are applied in rainy weather; makes the delayed dormant spray of Lime Sulfur and Nicotine Sulfate of highest effectiveness against aphids, psylla, red bug and thrips, because it spreads the Nicotine and makes it stick; greatly retards chemical reaction between Lime Sulfur and Arsenate of Lead; makes Nicotine Sulfate really effective when combined with Arsenate of Lead, for it liberates the Nicotine and spreads it over the insects; makes the spray cover smooth bark in a durable coating and spreads it into cracks and crevices where San Jose scale and similar pests seek protection. Use 1 pound to 100 gallons of spray mixture.

POTATO GROWERS: Kalco will spread your sprays and make them stick, rain or shine.

100 lb. sack, 18c. per lb.; 50 lb. sack, 19c. per lb.; 10 lb. sack, 21c. per lb.; trial size can, 25c.

Insecticides and Fungicides

Bug Death

The insecticide which contains no arsenic or Paris Green and is the one insecticide on the market absolutely harmless to animal life, which will kill the bugs and insects, protect the life of the leaves and plants, increase the yield, insure highest quality and promote the vigor of the plant or tree.

1 lb. pkg., 20c.; by mail, 28c.; 5 lb. pkg., 65c.; by mail, 77c.; 12½ lb. pkg., \$1.50; by mail, \$1.70; 100 lb. keg, \$9.50.



Bug Death Alpha

A Non-Arsenical Insecticide and Fungicide for Many Plant Eating and Sucking Insects

For sucking insects, lice, aphis, flea beetles and fungus this preparation is offered with full confidence in its protective as well as destructive power. There is no place where it can work injury, its sole mission being to protect and save. For the currant worm, the flea beetle, the rose or tree aphis, as well as other forms, its destructive power is assured. The housewife will here find the ideal agent to use for the health of all house plants, and the greenhouse worker be assured security from all necessity for using any of the arsenical preparations; the orchardist find here the ideal dust for his trees, carefully mixed, ready for use; the gardener be insured against attacks from those pests and diseases which so often work serious injury.

12 oz. pkg., 20c.; 80 lb. drum, \$9.25

Ansbacher's Triangle Brand Adheso Dusts

FOR FRUIT TREES, POTATOES, VEGETABLES

A—2—85—15 ADHESO SULPHUR LEAD ARSENATE DUST

A—6—9—5 ADHESO GREEN DUST FOR POTATOES

36 Per Cent Copper Sulphate 9 Per Cent Copper Arsenite

A—11—9—0 ADHESO BLUE DUST FOR POTATOES

36 Per Cent Copper Sulphate No Arsenic

FREE FLOWING SULPHUR

The extreme fineness (100 per cent-300 mesh) of the sulphur used in the 85-15 ADHESO DUST gives it a greater spreading quality and increases the adhesiveness which adds to its effectiveness. The Green and Blue Copper Dusts for potatoes are made under the Sander's Patented Process which gives them a Fineness, Adhesion, Greater Spread, and Effectiveness not found in other similar dusts.

Ansbacher's

B'lt Triangle Brand

Oxo Bordeaux

A more effective Fungicide than homemade Bordeaux mixture, which costs no more, and which can be used in combination with calcium or lead arsenate or any oil spray. Its addition to the oil spray has been proved to be of great benefit in the control of Red Mite and Scab.

Four pounds in fifty gallons of water has been proven superior to a 6—6—50 homemade Bordeaux.

Packed in four pound sacks.

Price, 25c. per lb.

SUNOCO SELF-EMULSIFYING ... SPRAY ...

FOR
SCALE, INSECTS, APHIS, and RED MITE
ON APPLE TREES

SUNOCO will not freeze or deteriorate, mixes readily with hard or soft water. Will not irritate the skin or injure clothing.

PRICES

50-gallon drums (non-returnable)	\$25.00
30-gallon drums (non-returnable)	18.00
15-gallon drums (non-returnable)	10.50
5-gallon cans	5.00
1-gallon cans	1.25

Insecticides and Fungicides

ANSET (Rose Bug Destroyer)

Highly effective when used on Rose Bugs, many hard-bodied insects, Red Spider, Mealy Bug and other garden pests. Use 1 part in 30-50 parts of water. Thorough spraying is essential.

Price, 4 oz. can, \$.30

ANTROL. See page 111.

APHINE

For green, black, or white fly, thrips, red spider and other sucking pests.

Price, $\frac{1}{4}$ pt., 25c.; $\frac{1}{2}$ pt., 40c.; 1 pt., 65c.; 1 qt., \$1.00; 1 gal., \$3.00.

ARSENATE OF LEAD. See page 108.

ARSENATE OF CALCIUM. See page 108.

BLACK LEAF 40

For destroying Green and Rosy Apple Aphis, Wooly Aphis, Cabbage Aphis, Lice on fruit trees, shrubs, and on garden and sweet peas, and all forms of soft-bodied sucking insects, without injury to foliage.

Price, 1 oz., 35c.; $\frac{1}{2}$ lb., \$1.25; 2 lbs., \$3.25; 10 lbs., \$11.85.

BORDEAUX MIXTURE. See page 108.

BUG DEATH. See page 109.

BUG DEATH ALPHA. See page 109.

CREOSOTE

For painting gipsy moth egg clusters.

Price, 1 qt., 50c.; 1 gal., \$1.25.

CROW REPELLANT (STANLEY'S)

What It Does

It rids your corn crop of crows and other corn pulling birds, and animal pests, such as moles, gophers, woodchucks, squirrels, etc. Saves loss of seed and labor of replanting. Positively will not clog any planter. Aids and hastens germination of seed corn. Protects seed from rotting in the ground. Insures larger yield per acre. Is non-poisonous and will not injure the seed. Will not kill birds or animals, but will keep them away and prevent destruction by them. Has been used successfully by experienced corn growers for over ten years.

Small can, for 1 bushel, \$1.00; by mail, \$1.07
Large can, for 2 bushels, 1.50; by mail, 1.58

CUT WORM KILLER

Price, 1 lb., 50c.; 5 lbs., \$2.00.

CYANOGAS

A new chemical insecticide which is rapidly coming into favor.

Grade G is prepared especially for greenhouse work, is very simple to use, and not dangerous if used according to directions.

Grade A is prepared for outside work, such as destroying ants, rats, moles, woodchucks, and other pests.

Prices: $\frac{1}{2}$ lb. can, \$.45; 1 lb. can, \$.75; 5 lb. can, \$3.00; 25 lb. can, \$9.00.

FISH OIL SOAP

This is a most effective and cheap remedy for destroying San Jose scale, oyster shell scale, plant lice and sucking insects on trees, shrubs, plants, vines, rose bushes, etc.

Price, 1 lb. box, 35c.; by mail, 43c.

HELLEBORE

Will be found satisfactory for use against rose slugs, currant worms, cabbage worms and many other leaf-eating insects, where a milder poison than Paris Green or Arsenate of Lead is desired.

Price, $\frac{1}{2}$ lb., 25c.; 1 lb., 45c.

LIME SULFUR. See page 108.

ADHESO DUSTS. See page 109.

NICOFUME—Liquid

A highly refined tobacco extract, containing 40% "free" nicotine, which may be used both for spraying and for fumigating.

Price, $\frac{1}{4}$ lb. can, 75c.; 1 lb. can, \$2.00; 4 lb. can, \$6.25; 8 lb. can, \$11.50.

NICOFUME—Powder

For fumigating greenhouses. 12 $\frac{1}{2}$ % nicotine. About three heaping teaspoonfuls for 5,000 cubic feet.

1 lb. cans, \$1.00; 5 lb. cans, \$3.75; 10 lb. cans, \$7.00.

PARIS GREEN. See page 108.

PYROX

The one best spray for potatoes, tomatoes, all other vegetables, grapes, strawberries, other small fruits, shrubs, roses and other flowers. It kills bugs, prevents fungous diseases and invigorates the foliage, thus increasing the yield. Easy to use—simply mix with water and spray through the finest nozzle. It will stick like paint.

1 lb. size, 50c.; 5 lb. size, \$1.75; 10 lb. size, \$3.00; 25 lb. size, \$6.25; 50 lb. size, \$10.75; 100 lb. size, \$15.50.

The Pyrox Spray Guide contains valuable information. Be sure to ask for it when you order.

SCALECIDE

The Complete Dormant Spray

Scalecide is a miscible oil spray for destroying scale, and used as a dormant spray is a very effective control for European Red Mite, Aphis, Red Bug, Leaf Roller, and other insect pests. Because of its oily nature Scalecide spreads in a thin film and penetrates into cracks without the aid of a spreader. Use 1 gallon to 15 gallons of water.

1 qt., \$.70; 1 gal., \$1.60; 5 gal., \$6.00; 10 gal., \$10.60; 15 gal., \$13.50; 30 gal., \$24.00; 50 gal., \$34.00.

Allowance of \$2.00 for 15 gal. drums if returned freight paid to factory.

SULFOCID

Sulfocid is a highly concentrated non-poisonous liquid sulfur fungicide—entirely distinct from lime-sulfur. It does not russet apples (bordeaux does); it does not devitalize foliage and dwarf the fruit (lime-sulfur does); it can be used on both peaches and apples and on all kinds of fruits and vegetables (no other fungicide can). It imparts to fruit a beautiful luster and finish. It costs no more than home-made bordeaux.

Prices, 1 qt., \$1.00; 1 gal., \$2.75; 5 gal., \$8.75; 10 gal., \$15.00.

SULPHUR. Powdered for mildew.

Price, 1 lb., 10c.; 5 lbs., 45c.; 10 lbs., 60c.

Insecticides and Fungicides

TOBACCO DUST—For Dusting

Price, 1 lb., 10c.; 10 lbs., 60c.; 100 lbs., \$4.00

TOBACCO DUST—For Fumigating

Price, 1 lb., 10c.; 10 lbs., 60c.; 100 lbs., \$5.50

TREE TANGLEFOOT

A safeguard for trees against the gypsy moth, canker worm, and all climbing insect pests. It should be applied before the foliage appears, a continuous band two inches in width being put around the trunk of the trees three or four feet from the ground. One pound will make a band seven to nine feet long. Perfectly harmless to the trunk (unless where the trees are very young and the bark thin and tender, in which case bind manila paper around the trunk before applying). Tanglefoot remains sticky during hot, cold or wet weather.

Prices: 1 lb. can, 60c.; 5 lb. can, \$2.75; 10 lb. can, \$5.25; 20 lb. can, \$8.00; 25 lb. can, \$11.00.

Quickly Kills Garden Pests

Science Provides
New, Safe Method
That Does the Work
Without Fuss



Cutworms, Sowbugs, Grasshoppers, Slugs, Snails, Earwigs, Etc., Are Exterminated

Snarol is a ready-prepared meal that you simply broadcast on the ground, under the vegetation. These pests eat the meal, and are quickly destroyed.

Prices—1 lb. packages, 45c; 3-lb. packages, 95c; 15-lb. bags, \$3.50; 50-lb. bags, \$9.50.



SPRINKLE WEEDS AWAY

I Kill Weeds
by Sprinkling



Dilute Dolge Weed-Killer in 40 parts of water and sprinkle on your drive, walk, cobble gutter, tennis court. Weeds dry up and turn to dust. One application usually enough for entire season. Prices, f. o. b., Portland:

1 qt.,	\$.60
1 gal.	1.75
5 gal.	8.70
10 gal.	15.00

Dolge Weed-Killer

Volck

A spray for the garden, nursery and greenhouse. Controls red spider, mites, white fly, scales, mealy bug, aphis, thrips, etc. Destroys the insects in all stages without injury to plants if used according to directions.

Prices— $\frac{1}{2}$ pt., 50c; 1 pt., 75c; 1 qt., \$1.00; 1 gal., \$3.00; 5 gal., \$12.00.



An easy, effective way to protect your roses and other flowering plants against insects and fungus diseases without making the treatment conspicuous.

Dusting with "leaf-green" Pomo-Green is the protective method used by experts! Best for your garden, too. Pomo-Green is the celebrated Massey Dust made more toxic and colored green.

Roses—Black Spot, Mildew or Chewing Insects are bound to appear. Pomo-Green prevents and controls these insects and diseases quickly and effectively.



Flowering Plants—Pomo-Green is a specific for the control of Snap-dragon Rust, Carnation Rust, Sweet Pea Mildew, Phlox Mildew, Lilac Mildew and many other fungus diseases of flowering plants and shrubs.

1 lb. can.....\$.50
5 lb. carton..... 2.00



5 lb. carton

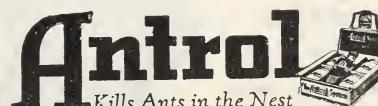
Kills Ants in the Nest

New Methods "Gets" Them at Their Source—
Safe, Permanent, Effective

The Antrol system is adapted to any size house or garden, and quickly destroys all species of sweet-eating ants. It is composed of small glass containers partially filled with special syrup and placed about the outside edges of the house or along ant "trails" in the garden. The ants smell the syrup, eat it, and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed.



Prices—Antrol sets containing four containers and one 4-ounce bottle of syrup, 95c; Antrol extra containers (each), 15c; Antrol syrup, 4-oz. bottles, 45c; pints, 95c; gallons, \$3.75.



Spray Your Plants This New Safe Way



ADVANTAGES OF USING EVER GREEN



Sure Death to All Common Insects.

Safety—Ever Green is absolutely non-poisonous to man, birds and animals.

Non-Injurious to Plants—It will not damage the tenderest shoots, harm buds or blossoms.

Appearance of Plants Not Affected.

No Soil Damage—Ever Green does not poison the soil.

Kills Both Chewing and Sucking Insects—Ever Green is both a contact and stomach poison to insects.

Highly Effective—against practically all plant insects both chewing and sucking types (Scale insects excepted) including Aphis, Thrip, Leaf Hopper, Cut Worm, Canker or Currant Worm, Tarnished Plant Bug (Aster Beetle) Leaf Roller, Cucumber Beetle, Cabbage Worm, Asparagus Beetle, Tent Caterpillar, Rose Chafer and Slug, and Squash Beetle.

LIST PRICES

1 $\frac{1}{2}$ oz. bottles, \$0.35; 6 oz. bottles, \$1.00; 16 oz. bottles, \$2.00; 32 oz. bottles, \$3.85; 1 gal. bottles, \$13.00

Double Tube Hand Duster

Light Weight. Low Priced. Durable.

Excellent for dusting gardens, flowers, bushes, trees and poultry houses. Handles Arsenate of Lead, Calcium, Paris Green, Sulphur and other dusts perfectly.

Price, 75c. each. By mail, 85c.



Feeny Model B Duster

This duster has been thoroughly tried out during the last few seasons and has proved itself to be the best of its kind on the market. It will dust any kind of dry powder and will distribute the powder in any quantity one may wish. The duster is very light, compact, and thoroughly made.

Price, \$1.25 ea.
By mail, \$1.35 ea.



Snugfit Respirator

For use when threshing grain, dusting orchards or similar work.

Price, \$1.50

B-D Sifter

Price, - - - - 75c.

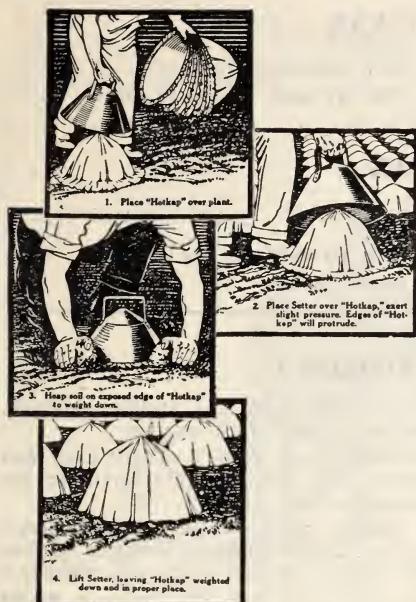
By mail, 85c.



Dickey Bug Death Duster



Price, - - - - 65c; by mail, 75c



NOTE HOW EASY TO USE

GERMACO HOTKAPS

Make More Profit!

THIS AMAZING NEW METHOD GETS
YOUR CROP TO MARKET EARLIER

GERMACO HOTKAPS can make you extra dollars this season. They protect plants from frost, wind, rain, insects and ground crusting. Thus they produce harder, quicker crops. You get higher prices!

Thousands were used in 48 states last year. They cost so little that growers cannot afford to be without them.

Write for free pamphlet or order today!

GERMACO HOTKAPS

NEW METHOD OF PLANT PROTECTION

Prices: 1,000 lots, \$11.50; 5,000 lots, \$11.00; 10,000 lots, \$10.75. 250 trial package, including special type garden setter, \$4.00; standard Germaco HOTKAP setter, \$2.50.

If you need HOTKAPS for your backyard garden, note these prices: 50 with garden setter, \$1.50; 100 with garden setter, \$2.25; garden setter alone, 50 cents.

Gator-Hide Mulch Paper



HOW PUT UP—GATOR-HIDE MULCH PAPER comes in two types. Type A for annuals, designed primarily for field culture. Type B, for biennial and perennial crops, such as currants, raspberries, nursery stock, etc., and also for home gardens.

PRICES

TYPE A		TYPE B	
300-yd. Rolls—18-inch.....	\$3.50 per roll	150-yd. Rolls—18-inch.....	\$3.50 per roll
300-yd. Rolls—36-inch.....	7.00 per roll	150-yd. Rolls—36-inch.....	7.00 per roll
Garden package, 15-yd. Roll, Type B, \$1.00			

Soiltex

Do you want to know which fields need lime? || two cents. Only a minute or two required for
How much they need? With Soiltex you can || each sample.
make your own test, and at a cost of less than

Price \$1.00 sent prepaid

TROWBRIDGE'S GRAFTING WAX

The finest quality made, put up in neat packages with directions for use.
 1 lb. packages, 45c.; $\frac{1}{2}$ lb. packages, 25c.; $\frac{1}{4}$ lb. packages, 15c. By mail, 8c. per lb. extra.

BLAKE'S GRAFTING WAX

Will not run in hot weather nor crack in winter.

1 lb. packages, 45c.; $\frac{1}{2}$ lb. packages, 25c.; $\frac{1}{4}$ lb. packages, 15c. By mail, 8c. per lb. extra.
BEESWAX. 50c. per lb. By mail, 8c. per lb. extra.

Adco Artificial Manure

ADCO is a powder which, when mixed with almost any non-woody vegetable waste and kept moist, gradually converts the mass into real manure fully equal to the farmyard product in fertilizing power, but free from foul odor, flies, weed-seeds, etc. Anybody can make ADCO Manure. The process is perfectly simple and not at all laborious.

GARDENERS, by using their refuse, can now have plenty of manure at low cost and little trouble.

FARMERS, by utilizing straw, corn stalks, etc., can secure their manure without the expense and labor of maintaining live-stock.

VEGETABLE GROWERS can turn back into

their soil as rich manure the stalks, cuttings, vines, leaves, etc., heretofore wasted.

NURSERYMEN and FRUIT GROWERS can convert leaves, etc., into valuable fertilizer for their trees and bushes.

ADCO, in 25-lb. bags (from dealers only) (Enough for 12 wheelbarrow loads of garden waste, making one-half ton of manure.)

Price, \$2.00

ADCO, in 100-lb. bags (4-25's) (Enough for a heap 6 ft. x 6 ft. x 6 ft., making about two tons of manure.) Price, \$7.50

Each package is accompanied by full, explicit directions. The process is so simple that mistake or failure is almost impossible.

Reed Plant Stands

These stands are 26 $\frac{1}{2}$ in. from floor to top of stand and have a galvanized pan 27 in. long, 8 in. wide, and 6 in. deep. They are made in two styles.

Number 540—\$5.00

which is made of a finely woven reed and has a pan with a false perforated bottom with a tube in one corner extending to the top of the pan, which permits the soil to be watered from

below by pouring water through the tube and also provided ventilation for the soil to prevent it becoming sour, and the

Number 539—\$4.00

which is woven of splints about $\frac{1}{2}$ in. wide and which does not have the false bottom to the pan.

Both stands come in a variety of colors: cream, brown, green and mahogany.

Stockaid

Stockaid Animal Spray Kills Flies, Mosquitoes and Lice. Also Repels. Will not Stain Animals. Leaves Hide and Hair in Good Condition. Will not Clog Sprayer. Money-Back Guarantee.

The proper and most effective way to spray STOCKAID is over and above cows and horses. In this way the fog-like spray comes in contact with flies and mosquitoes soaring through the air, and also settles down on the surface of the hair and kills flies and mosquitoes on the animals.

During the winter months cattle should be sprayed with STOCKAID to control lice infestation.

Price, per gallon, \$1.75

Creonoid

LICE DESTROYER AND COW SPRAY

A most efficient spray to protect cattle and horses from flies. Antiseptic and non-poisonous. Used in hen houses to kill lice.

Flies breed in manure heaps and go from place to place carrying disease germs along with them. Flies are responsible for many of the epidemics that appear among people and animals.

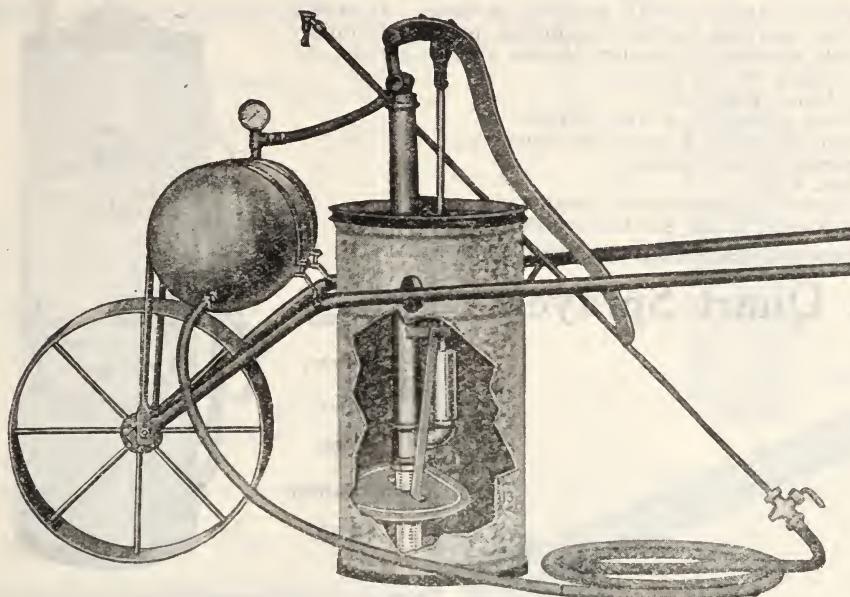
If their breeding places are regularly sprayed with Creonoid they cannot breed and the number around the buildings will be greatly diminished.



Price, per gallon, \$1.25

Various Hudson Sprayers

For Spraying All Insecticides on Potato Vines, Shrubs, Small Trees, House Plants, Live Stock and Poultry



This Ideal outfit is equipped with a reserve air pressure tank and gauge. Once the desired pressure has been reached, this reserve air chamber enables the operator to maintain an even high pressure with less effort. In fact, the operator can stop pumping and spray several minutes before the pressure is reduced to a point where further pumping is necessary. It will do all the work a Barrel Pump can, and has the added advantage of being so easily portable. One man can operate it alone.

Pump. Our regular No. 4 Barrel Pump. Fastened in top of tank by arched steel support and is easily removed.

Tank.—Heavy copper-bearing galvanized or brass sheets reinforced at top and bottom with channel iron hoops. Fitted with malleable castings for attaching to frame. Easily removed. Capacity 15 gallons.

Discharge Equipment. 6 feet of $\frac{3}{8}$ inch spray hose and a 4 foot $\frac{1}{4}$ inch iron pipe extension—total 10 feet, angle Ideal nozzle and leakless shut-off.

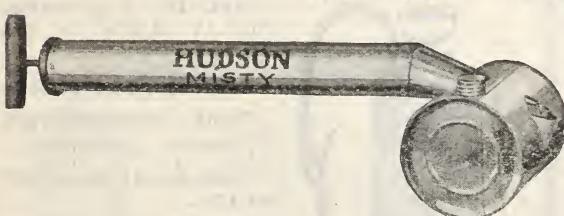
Air Pressure Tank. Boiler iron with joints welded. Tested under pressure of 275 pounds. Fastened to frame by steel straps and supports. Fitted with a pressure gauge reading to 200 pounds.

Frame. Heavy steel tubing reinforced with channel iron cross braces.

Wheel. 18 inches diameter, $2\frac{1}{2}$ inch tire; light, strong and rigid. Provides easy traction under heavy loads and in soft soil.

Shipping Weight. Securely crated, 110 lbs.
No. 33. Ideal, Galvanized Tank.

Hudson Misty Sprayer



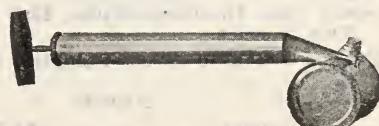
Pump. $1\frac{3}{4}$ inches diameter, 14 inches long. Fitted with Hudson plunger leather and heavy rod.

Tank. 4 inches diameter, $4\frac{1}{2}$ inches long. Lock seamed and thoroughly leakproof. Fitted with drip cup to absorb seepage. Capacity one full quart. Length over all, 21 inches.

No. 452. MISTY. Tin, price 40c.

Hudson Midget

Strong, compact sprayer with cone and air chamber. Capacity, pint. Air chamber, $10 \times 1\frac{1}{4}$ inches. Tank, 3 inches in diameter, 3 inches long. Style, heavy, bright tin. No. 202, 30c each.



NO. 22 BANNER

Compressed Air Sprayer

This sprayer is adapted for all spraying purposes. It cannot be excelled for spraying garden vegetables, plants, shrubbery and flower beds, disinfecting poultry houses, stables, cellars, etc.

Tank: 21 inches by 7 $\frac{1}{2}$ inches.

Capacity: About 4 gallons.

Tank: Double seamed and well riveted.

Pump: Seamless brass, 2 inches in diameter.

Pump castings: Heavy brass.

Hose: 2 feet, 5 ply.

Carrying Strap: Adjustable with snap ends.

Automatic Nozzle: Brass for three different sprays.



No. 22

Banner,

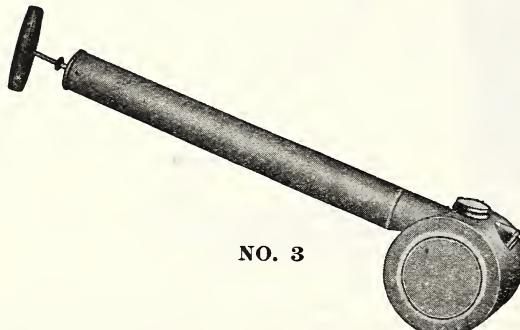
Brass,

\$7.50

Galvanized,

\$5.50

One Quart Sprayer



NO. 3

Pump Chamber: 18 inches by 1 $\frac{3}{4}$ inches.

Tank: 4 $\frac{1}{2}$ inches by 4 inches.

Capacity: One quart.

Double seamed tank, strong and durable. Made with large air chamber, cone-shaped end extends through the reservoir. An excellent sprayer for spraying garden vegetables, disinfectants, fly oil, etc. A good, strong, well-made sprayer.

Price, 40 cents each.

Blizzard Continuous Sprayer

(One Quart)



SPECIFICATIONS

Made in All Brass with Copper Tank.

Pump Chamber—15 in. by 1 $\frac{1}{4}$ in.

Tank—4 $\frac{1}{2}$ in. by 4 in.

Capacity—1 qt.

Screw Cap, Discharge Tube, Ball Check Valve.

Two Nozzles.

Packed 1 doz. in case. Shipping weight 16 lbs.

PRICE

Copper.....\$1.50 Ea.

Justrite Compressed Air Sprayer

The construction of the Justrite is the same as the Banner shown above. Tank is double seamed to stand heavy pressure. Handle locks in brass pump head. Automatic self-closing nozzle produces a broad, long distance, fine mist or coarse spray.

The size of the Justrite makes it very useful for spraying around the garden, flower beds and shrubbery, also for spraying disinfectants in poultry houses, etc.



Tank: Heavy galvanized iron, 17 inches by 6 $\frac{1}{4}$ inches.

Capacity: Two gallons.

Pump: Seamless brass, 1 $\frac{3}{4}$ inches in diameter.

Pump Head: Brass, will not rust.

Hose: 2 feet, best grade.

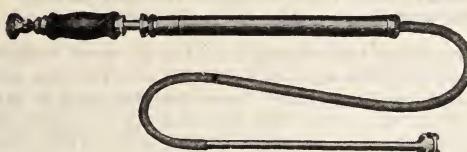
Carrying Strap: Broad and heavy.

Automatic Nozzle: Brass for three different sprays.

Price, \$5.00.

Sturdy Spray No. 45

IT'S DOUBLE ACTING



The Same Spray with Half the Labor

An ideal all-purpose hand sprayer made entirely of brass. It is double acting, producing a continuous spray, and will generate a pressure of 200 lbs. Can be supplied with galvanized steel Knapsack tank or may be used in connection with a bucket. Equipment includes 4 nozzles of special design for variety spraying.

USES—For the spraying of trees, shrubs, vines, field crops, for handling whitewash and disinfectants, washing automobiles, windows, fire fighting and other purposes.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Auto Spray No. 50

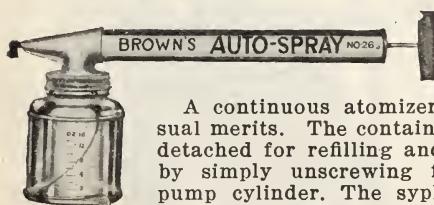
This sturdy little machine is almost identical to Auto-Spray No. 9 in construction and manipulation, but with smaller capacity, holding about two and one-half gallons. It is particularly recommended for use where weight is a factor, as when the women-folk or youngsters help out with the spraying.

Construction is same as No. 9. Equipment and uses same as No. 9.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Auto Spray No. 26 A. G.

With Glass Tank



A continuous atomizer of unusual merits. The container can be detached for refilling and cleaned by simply unscrewing from the pump cylinder. The syphon tube is easily removed and quickly cleaned by removing the nozzle.

USES—For spraying garden crops, for use in greenhouses, for handling disinfectants and fly oils. It can be used with all spraying solutions.

Price, \$1.00

Auto Spray No. 9

COMPRESSED AIR SPRAYER



Sturdy compressed air sprayer, equipped with a heavy brass screw cap to lock pump in reservoir. The metal in the tank is lock-seamed, well riveted, soldered inside and out. May be obtained with brass or galvanized tank. Brass tank is strongly recommended as it will withstand strong solutions. Capacity, 3 1/2 gallons.

USES—For spraying field crops, shrubs, vines, poultry houses, for removing wall paper, disinfecting, whitewashing, creosoting shingles, applying floor oils and for general purposes.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Brown Victory Low

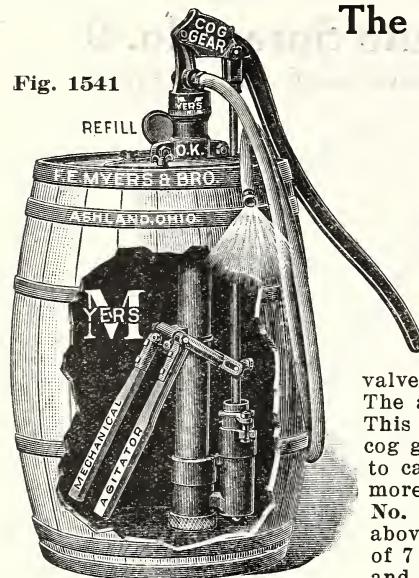
Priced Sprayer



A quick acting, low priced sprayer of unusual utility. Screw lock style pump and galvanized outside finish. Efficient and sells for \$4.00.

The Myers O.K. Cog Gear Spray Pump

Fig. 1541

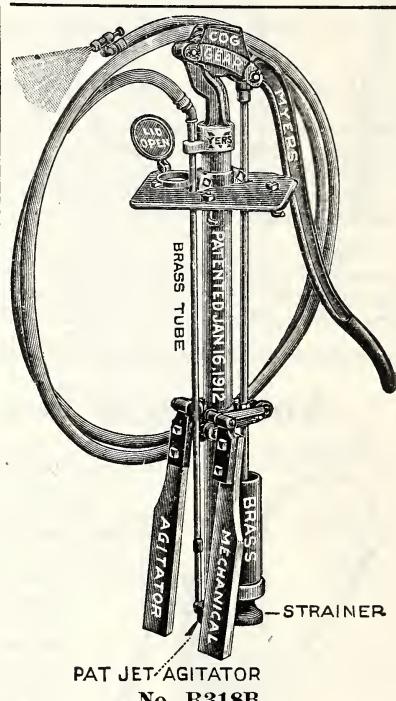


Rep. No. R308B

WITH MALLEABLE IRON BASE AND HANDLE
For Hot, Cold or Any Kind of Mixture. Has Mechanical
Agitator, Solid Brass Ram Plunger, Ground Bevel
Valve and Seat. $2\frac{1}{2}$ Inch Cylinder

The cog gear increases the leverage 33 1-3 per cent. over the ordinary plain handle. The special features are the cog gear, and the malleable iron base which is adjustable and is made for end or side of barrel. Base for end of barrel is furnished regularly. The plunger is a solid brass tube with closed end, is outside packed, with hemp packing. The packing gland is adjusted by two bolts. The valve and seat are hard brass. The air chamber is $2\frac{1}{2}$ inch. This in connection with the cog gear enables the operator to carry a pressure of 200 or more pounds, if necessary.

No. R308B, Outfit same as above, with one lead of 15 ft. of 7 ply, $\frac{3}{8}$ in. discharge hose and one Fembro (Fig. 1290) nozzle.



Myers Spray Pumps

No. R318B. A spray pump of a construction that is the very best in all its parts, being self-contained and ready for operation, when bolted to the barrel. Has bronze ball valves and brass seats; the plunger, cylinder and discharge pipe are all brass.

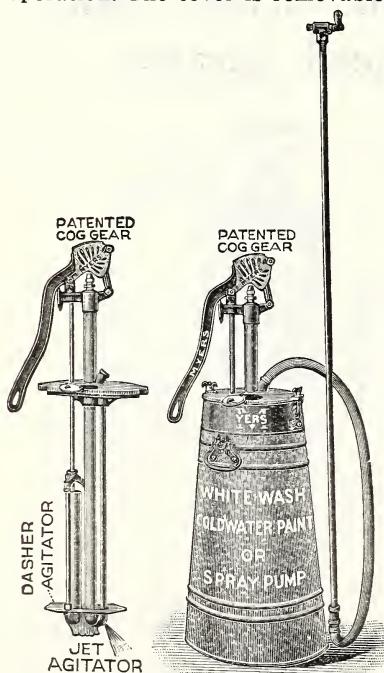
No. 329. Whitewash, Cold Water, Painting Machine and General Purpose Sprayer, with patent double agitator, a most complete and serviceable outfit. The tank is made of heavy galvanized iron, with a wide bottom, so as to set steady in operation. The cover is removable, is held securely in place by

two end bolts with thumb nut, one on each side, which hold the cover tight and prevent any spilling or splashing of the liquid. Holds seven gallons and is fitted with Bordeaux nozzle, brass ball valves, and has both jet and dasher agitator.

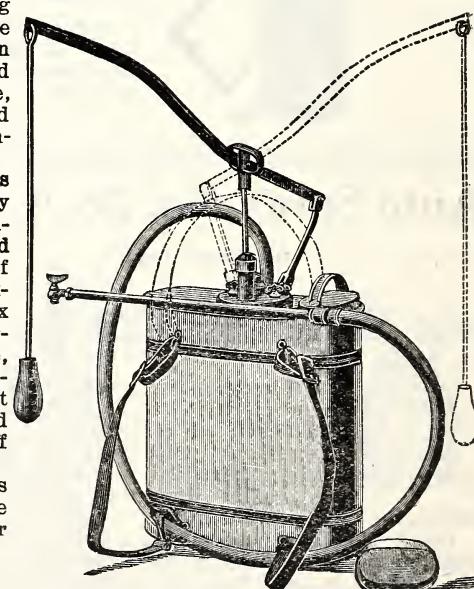
No. 330. Myers Knapsack Spray Pump, made with galvanized iron tank, and fitted with five feet of $\frac{1}{2}$ -inch hose, pipe extension and Bordeaux or graduating Vermorel spray nozzle, which can be graduated from a fine mist spray to a solid stream, or shut off entirely.

No. 331. Same as No. 330, except made with heavy copper tank.

Price on application.



No. 329



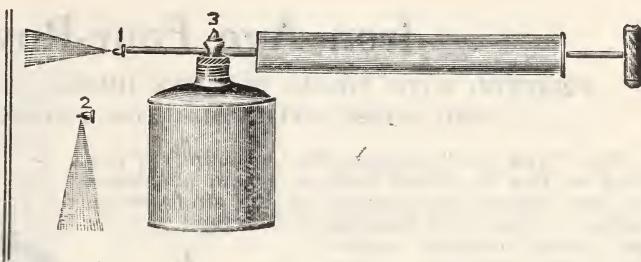
Myers Knapsack Spray Pump

Spray Boom

FOUR-ROW

This boom is adjustable both horizontally and perpendicularly. By moving the spray boom proper on the uprights, you can raise or lower the nozzles as required. Then by moving the clips on the horizontal bar the nozzles can be so placed to spray rows of a number of different widths.

This boom is made so that the ends can be swung up, as shown in the cut, so that sprayer can be drawn on the road or through a gate without danger of the boom being broken off by any obstruction.



The Robertson Compressed Air Sprayers

Are different from all others. They work easier, give a more powerful spray, last longer, always work. They are the only sprayers with the Robertson Patent Pump, which has a higher working efficiency than any other pump ever made.

These sprayers have a Universal Nozzle that sprays up and down and to either side, in addition to the direct spray nozzle.

PRICES.

Size, One-Quart.

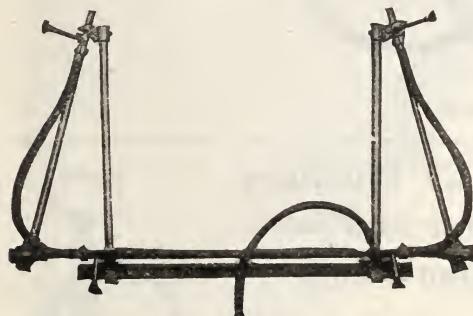
Tin Pump and Galvanized Iron Container....\$1.00

P R E V E N T D I S E A S E

By Keeping Your Premises Germ Clean and Sanitary.

The Compressed Air Sprayer, with a good insecticide and germicide solution, quickly destroys all insect and germ life. Bugs, spiders, roaches, ants and other insects, as well as all disease germs, are killed almost instantly. It keeps sinks, garbage cans, cellars, closets, stables, kennels, poultry houses and all other parts of your premises in a germ-free and sanitary condition.

Do not be annoyed by insect pests or run the risk of contagion from disease germs when you can have everything clean and sanitary by such an easy process.



The Myers Double Acting Cog Gear, Complete Spray Pump Outfit, No. R316B



MOUNTED ON SKIDS WITH 50 GALLON BARREL AND MECHANICAL AGITATOR

With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp packed plunger.

Special features: Cog gear movement, increased leverage adapted for spraying under heavy pressure, mounted complete, occupying smallest possible space. Capacity sufficient for eight nozzles; well adapted for spraying potatoes.

Pump complete, 50 gallon barrel mounted on skids, with pressure gauge, one 15-foot lead, $\frac{1}{2}$ -inch, 5-ply discharge hose, one Fembro nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator.

Price on application.

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

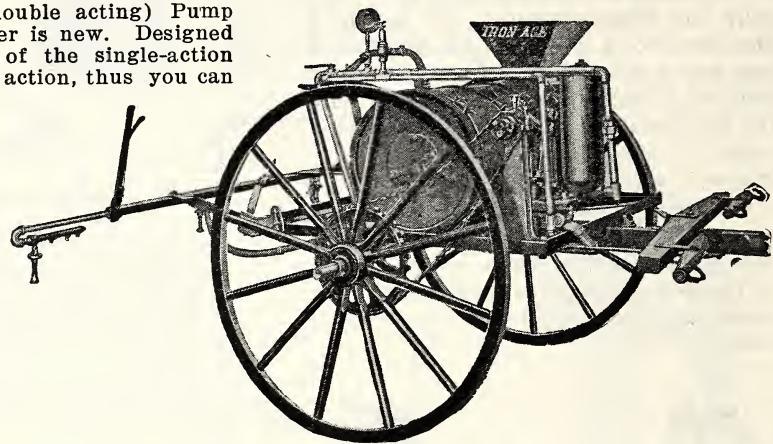
Iron Age Four-Row Sprayer

EQUIPPED WITH THILLS FOR ONE HORSE. 55 GALLON TANK DUPLEX PUMP.
TWO HORSE WITH POLE. 100 GALLON TANK TRIPLEX PUMP.

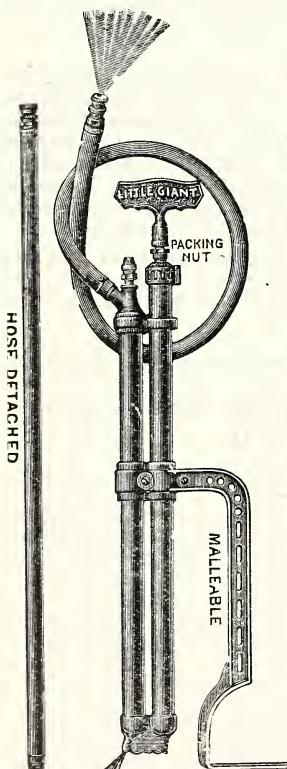
The "Iron Age" Duplex (double acting) Pump used on this No. 354-S Sprayer is new. Designed to give double the capacity of the single-action pump. It also gives smoother action, thus you can get higher pressure under the same conditions. This surplus power saves expense in the long run, quickly offsetting the slightly higher first cost. Its greater power is particularly important when the vines become very dense and heavy mixtures are used to prevent blight. This advantage will be readily appreciated by practical farmers.

This fast-working, long-lived machine will deliver spray at a pressure of 150 pounds or more. Width of rows is adjustable to 28, 30, 33 or 36 inches.

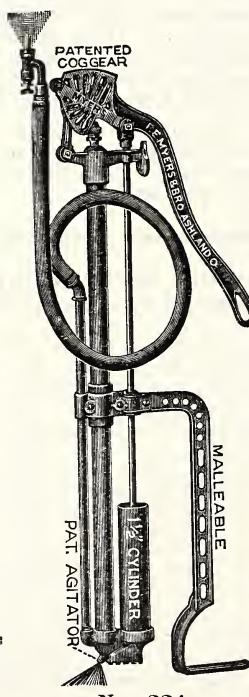
Price on application.



Myers Spray Pumps



BRASS BALL VALVES
No. 327½



No. 324

No. 27 Plumbers Force and Suction Pump

For Cleaning Clogged Water and Drain Pipes, and for Pumping Water out of Boats, Launches, Cellars, etc.



Many times on the farm the supply pipe leading through becomes clogged with leaves and obstacles and this pump will quickly clean such pipes. Also used for cleaning drain pipes from the sink, and for many other such purposes.

Construction—Made entirely of brass, with brass ball valve. The footrest and handle are unbreakable malleable iron.

No. 327½. Myers Little Giant Brass Spray Pump, with agitator, complete with hose and Imperial combination fine and coarse spray and solid stream nozzle.

No. 324. Myers Cog Gear Brass Spray Pump, with agitator, complete with hose and graduating Vermorel fine and coarse spray and solid stream nozzle.

With Bordeaux nozzle for spraying whitewash, \$1.00 additional.

PRICE ON APPLICATION



We furnish a two-row attachment at small cost.

Price
on
application.

Orchard Duster American Beauty Dust Sprayer

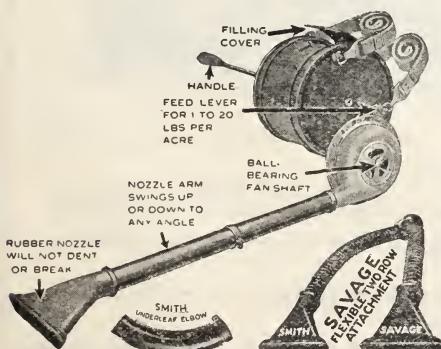
The American Beauty Dust Sprayer is a one man machine. It is small in size and cost; big in action. It is easily operated, has a large, powerful bellows, and is capable of accomplishing an enormous amount of work. It is, in truth, a "Little Giant." Filled and brought into action in less than five minutes; always dependable, and always available at critical times; requires only that care which any man of common sense will give to every piece of machinery he owns.

Niagara Hand Dust Machines

The Niagara Blower Gun is an improved type of hand duster which embodies many of the patented features of the larger motor-operated models, including the approved brush and feed devices. Its mechanical construction is very simple and durable. This gun is designed for low growing crops, such as potatoes, strawberries, tomatoes, etc., and also is adapted for treating small trees in young home orchards, etc. The weight is about 12 pounds, and its capacity for dust material is about 8 pounds. A flexible metal hose section permits free direction of dust mixture.



NIAGARA BLOWER DUST GUN



Savage Duster

Handles all insecticides in powdered form. High grade and well built. Adapted for dusting trees, and the many kinds of infections to which field and garden are subjected.

Built of the finest material and workmanship, which insures long hard service.

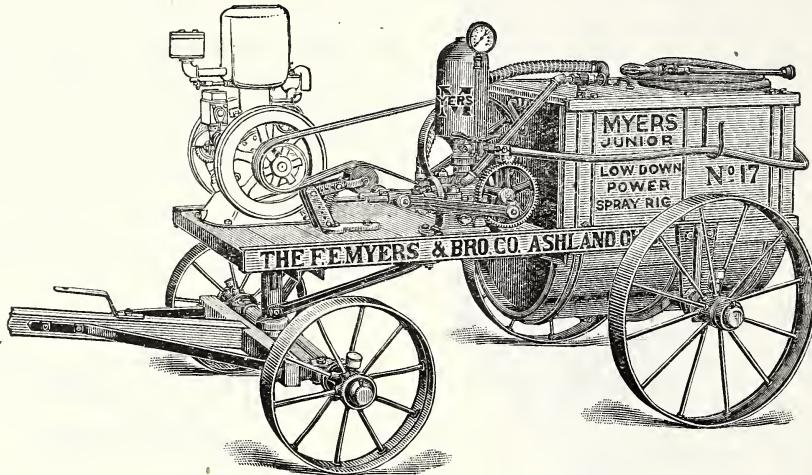
Price on application.

The Myers Junior Low Down Power Spray Rig With All Steel Short Turn Truck

COMPLETE EXCEPT ENGINE

DOUBLE ACTING PUMP, BELT DRIVEN

46-inch Tread, 43 Inches High, 78 Inches Long.

Capacity: $5\frac{1}{4}$ gallons at 50 R. P. M.; $6\frac{1}{2}$ gallons at 60 R. P. M.

Specially designed for the farmer with small orchard who raises fruit for his own use, or what is generally known as Farmers' Spray Rings or Community Spraying, where several farmers combine to do their own spraying or hire one of their number to spray for all.

Pump—Double acting, back geared 5 to 1.

Plunger—Brass, telescope pattern; hemp packed.

Piston—Solid brass, with heavy brass stuffing nut.

Pulley— $14 \times 2\frac{1}{2}$ inch, crown face.Cylinder— 2×4 inch, removable brass shell.

Valves and Seats—Brass beveled and ground in.

Gear and Pinion—Machine cut.

The Myers Junior Power Spray Outfit

FITTED WITH 2-INCH HORIZONTAL DOUBLE ACTING FORCE PUMP
COMPLETE EXCEPT ENGINE. BELT DRIVEN

Tank—Cypress, 100 gallons, fitted with semi-rotary agitator swung from top of tank and connected direct to face-plate on the pump.

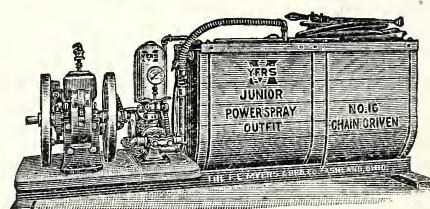
Frame—3-inch channel steel.

Deck—(On which engine and pump are mounted), plank, 30×47 inches.

Pump—No. 580 double acting, back geared 5 to 1.

Capacity— $5\frac{1}{4}$ gallons per minute at 50 revolutions, $6\frac{1}{2}$ gallons at 60 revolutions.Cylinder— 2×4 inch, removable brass shell.

Plunger—Brass, telescope pattern; hemp packed; handles hot or cold mixture.



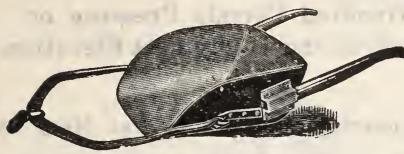
Valves and Seats—Brass beveled and ground in.

Piston— $9-16$ inch solid brass, with heavy brass stuffing nut and brass follower.Gear and Pinion— $1\frac{1}{4}$ -inch face, machine cut.

Sprocket Chain Drive.

Price on Application

Steel Road Scrapers



Made of heavy steel plates, cut from a single sheet pressed cold, lapped and riveted at the corners, giving greatest strength where needed. Special steel is used in the bail, and they are hung so as to handle easily. Heavy shoes or runners are used to stiffen the bottom.

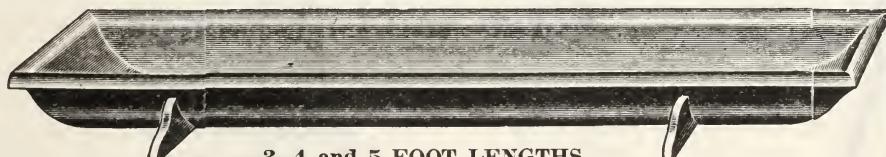
Steel Head for Drag



This illustration shows a simple device whereby a drag can be readily made by using STRAIGHT plank. We also furnish the drag complete, as shown above.

PRICE ON APPLICATION

Cast Iron Hog Troughs



3, 4 and 5 FOOT LENGTHS

Brass Jacket Drive Well Point

This well point is made of galvanized iron pipe with elliptical holes punched of uniform size an equal distance apart. It contains the greatest number of holes possible to punch in a pipe and retain sufficient strength for driving.

PRICE ON APPLICATION

No. 661



Deming Close Top Pitcher Spout Pump



Fig. 125

ADJUSTABLE LEVER AND CUT-OFF BASE
FOR A
VERTICAL SUCTION LIFT OF 25 FEET.

Myers Self-Oiling Bulldozer Power Pump

Fully Inclosed Back Geared Five to One Renewable Bearings.

One Hundred Pounds Pressure or Two Hundred and Thirty Feet Elevation.

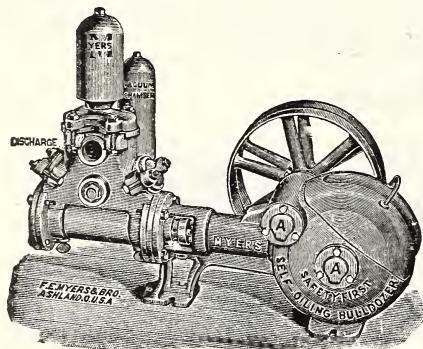


Fig. 612

Maximum Capacity 500 Gallons Per Hour at 70 R. P. M. of Piston—Usual Speed 60 to 65 R. P. M.

Myers Self-Oiling Bulldozer Power Pump with vacuum chamber, $2\frac{1}{2} \times 3$ inches.

Brass lined cylinder, 12x2 inches.

Brass piston rod, $\frac{1}{2}$ inch.

Tight and loose pulleys.

Suction and discharge, $1\frac{1}{4}$ inches.



Fig. R72

Fig. R72. A double acting, anti-freezing force pump for shallow or deep wells. Has a 3-inch brass lined lower cylinder, with glass valve seat. The brass upper cylinder is $4\frac{1}{2}$ feet below the platform, tapped for $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

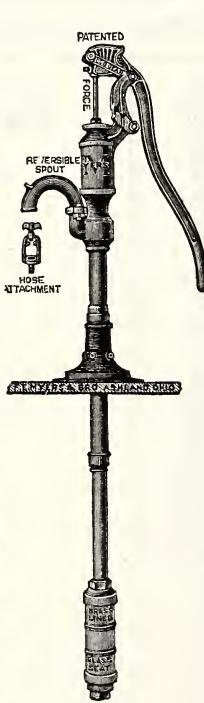


Fig. R1072

Brass Lined Cylinders

Illustration shows the cylinder. It is made with quick closing spring cushion Poppet valves. All plungers have brass cage, valve and seat.

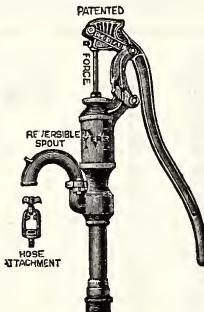
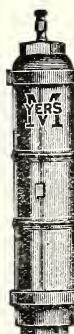


Fig. R1072. A single acting anti-freezing force pump. Has adjustable base and reversible spout; 3-inch brass cylinder with glass valve seat, tapped for $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.



Fig. R1052

Fig. R1052. Lift pump, anti-freezing. Has adjustable base and reversible spout; 3-inch brass lined cylinder with glass valve seat, tapped for $1\frac{1}{4}$ -inch pipe. Capacity, 440 gallons per hour.

Price on application.

Myers House Pumps

Prices on Application

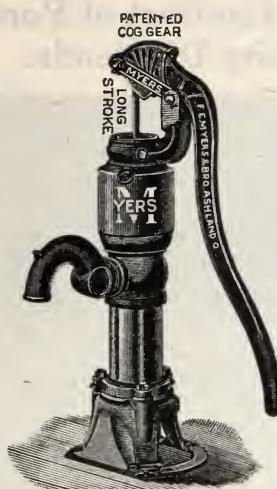


Fig. R245



Fig. R220

**MYERS COG GEAR
HOUSE LIFT PUMP**

This pump has siphon spout. Also fitted with 3-inch brass cylinder, glass valve seat and patent drop valve. Tapped for 1½-inch pipe.



Fig. R251

**MYERS LONG STROKE COG GEAR
DOUBLE ACTING HOUSE
FORCE PUMP**

This pump is double acting, has heavy seamless brass upper and lower cylinders, with patented glass valve seat, fibre rubber check valve and expansion plunger bucket. A powerful pump for forcing water to an elevation or into a tank. Tapped for 1¼-inch pipe.

**MYERS LONG STROKE COG GEAR
BRASS CYLINDER PITCHER PUMP**

Built in strictly first-class manner, with seamless drawn brass cylinder, rubber fibre check and revolving top. Tapped for 1¼-inch pipe.



Fig. R416

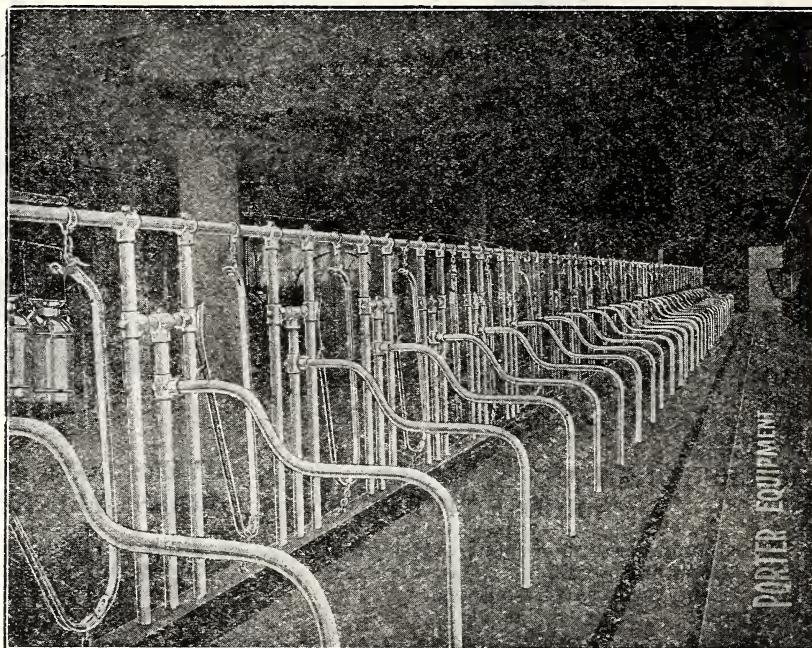
**MYERS LONG STROKE COG GEAR
PITCHER PUMP**

This pump is built to fill the requirements of a pitcher pump with extra large capacity. It is fitted with rolling motion cog gear handle, adjustable to any desired angle. The cylinder is bored and highly polished. Arranged to drop the water to prevent freezing. Tapped for 1¼-inch pipe.

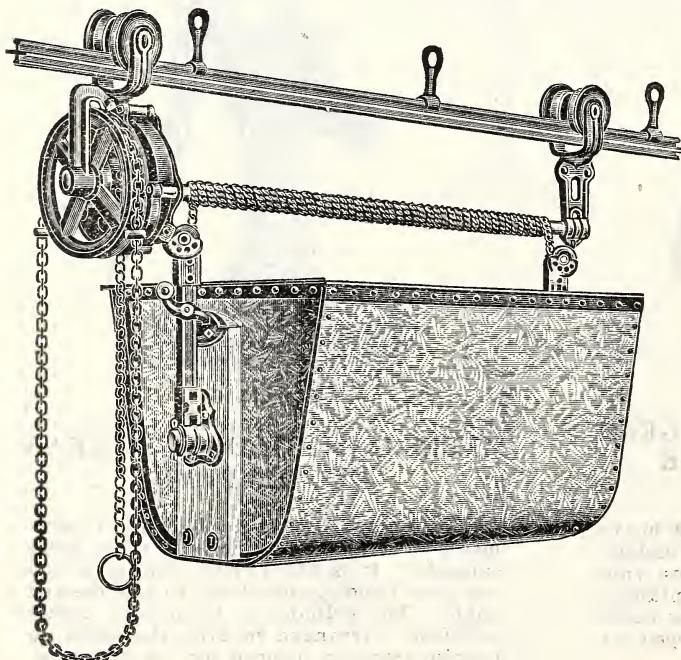
Porter Barn Equipment

The Cleanliness, Convenience and Comfort of Porter Equipment Will Swell Your Dairy Dividends.

The better care you give your cows, the better they will pay you. Stable them in light, clean, comfortable, sanitary quarters, and they'll require less feed, keep freer from disease, produce more milk, with a higher percentage of butter fat, and your milk and butter will bring top-notch prices. These are facts proved over and over again in the experience of successful dairymen who are using Porter Stalls and Stanchions. Porter Equipment in your barn will mean a big boost for extra profits, for it's built with practical, common-sense understanding of the care the dairy cow needs for best results. It keeps the stalls clean, prevents waste of feed and manure.



**Expert Advice on Barn Plans and Equipment
Free for the Asking**

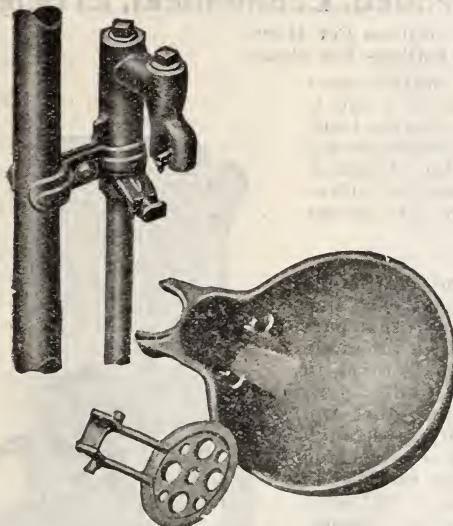


Porter Litter Carrier

With it one man can do the work of three, and do it better and easier. It is the handiest and most satisfactory litter carrier on the market. The chain hoist gives the biggest lift for the power and the quickest action. The hopper is made of heavy galvanized steel with capacity of 10 bushels; is held automatically at any height, and is provided with a dumping device, which is tipped at will by the man in the stable. Has one-piece steel track, carrier wheels are roller bearing, and are swiveled so carrier will go around the sharpest curves safely. No end motion, no jogging, liquid litter will not slop over—the only litter carrier with a stationary arm.

Price on application.

Porter Automatic Drinking Bowl

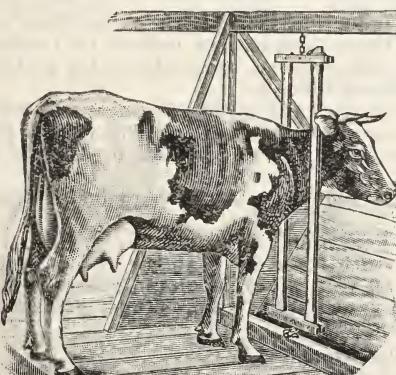


Cannot overflow because automatic valve is controlled entirely by the pressure plate. Valve seat, stem and spring made of highest grade brass. Bowl, 8 1/2 inches deep, 4 1/2 inches diameter, constructed to fit 3/4-inch pipe. Can be attached to 1-inch or 1 1/4-in. steel tubing supports.

Robertson's Patent Chain Hanging Stanchion

Practical, Safe and Durable, and Afford Comfort to the Animal

Made with Adjustable Neck Space



A pleased customer is the best possible endorsement that an article can have. These stanchions are in use by thousands of the most successful dairymen and farmers all over the country, who have had practical experience and know that these stanchions are not an experiment.

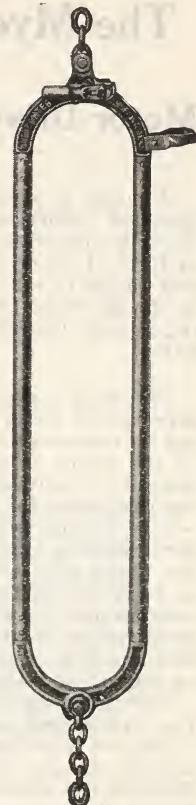
Porter Cow Stanchions

Fig. 15

The new Duplex-Latch Cow Proof Stanchion is made from high-grade carbon tubular steel tubing, 1 15-16 inches diameter.

Fig. 14

Porter Sanitary Wood Lined Stanchion U-Bar is made of high carbon steel, latch opens easily and when locked is cow-proof.



Stanchion Basin



An examination of this cut shows its advantages; can be emptied and cleaned in 3 minutes, without fouling supply pipe; is easily kept anti-septic, and can be quickly connected, being screwed on the upright pipe inside of basin.

PRICE ON APPLICATION

The Myers Self-Oiling Electric Pump and Home Water System

Motor Driven, Automatically Controlled, Economical, Efficient

MADE IN TWO SIZES: { 200 Gallons Per Hour
300 Gallons Per Hour

A pump is purchased for the purpose of delivering water under specified conditions. In other words, the purchaser of a pump is really buying water. The amount of water delivered in a given time, or term of years, depends upon the pump, its quality, workmanship and ability to take care of itself, and not to require undue attention. In the Myers Self-Oiling Electric Pump we have provided the following special features that are vitally necessary in a modern power pump.

SPECIAL FEATURES

Carefully and accurately machined parts; perfect and continuous lubrication; extra large or oversize valves so located that each one can be removed without disturbing any other valve or any other part of the pump or pipe. The suction valves are placed at an angle instead of vertically. This avoids all right or acute angle turns in the passage of the water through the pump from suction to discharge—direct water ways. All parts fully enclosed, excluding dust and dirt, insuring long life and service. The pulley shaft extends through the pump with two self-cleaning, removable bearings—one located on each side of the pitman connection, which allows the used oil to pass around the end of the shaft and bearing, washing out all sediment before returning to the oil pump. A 3 1/8-inch pitman connection running in oil, which is five times the size of connection used on any other make of pump, as they use a 1/2- or 5/8-inch crank pin.

Individual air chambers over discharge valves thoroughly cushion the stream and prevent pounding—noiseless.

Suction and discharge pipe taken from the body of the pump—not off the cap over the discharge valves, which require the taking down of the discharge line to examine any valve, as is used in practically all other pumps.

The pump is fitted throughout with solid brass pitman, crosshead, piston rod, plunger castings, valve seats and valve posts, seamless brass cylinder, and quick closing special rubber self-priming valves, all brass dependable air intake valve that will not rust or corrode, malleable iron belt tightener with specially treated wood pulley with compression grease cup; has self-pinning vacuum chamber on suction line to assist the even flow of water to the pump.

Best quality endless belt, 1 1/4 inches in width, prevents slipping when starting under load.

Tank: Galvanized iron only, electric welded; size, 16x48 inches, 42 gallons capacity, mounted on iron bed plate, carrying both pump and tank.

These special features of the Myers pump, in connection with the highest class motor, guarantee to the purchaser the maximum in value.

EQUIPMENT

Motor: We use only motors of the repulsion and induction type, with extra high starting torque, the highest class and quality made in the United States, because we believe in furnishing a motor that compares with the pump, as we find it much better to use these high class motors than to keep up a service department, as that causes everybody trouble.

An automatic pressure controller is supplied with pneumatic tank outfits, by means of which the tank pressure is controlled automatically. Controllers are regularly set for a minimum pressure of 20 pounds and a maximum of 40 pounds, and can be adjusted to 30-50 pounds pressure if desired to reach the top floors of a high building.

The 300-gallon pump will supply a 3/4-inch Gem nozzle wide open at 35 pounds for sprinkling purposes.

Capacity 250 Gallons Per Hour

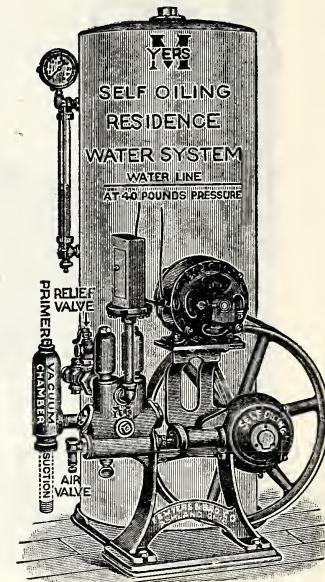
No. 906AT. Myers Self-Oiling Home Water System, with vacuum chamber, relief valve, air valve, pressure controller, endless belt and 1-6 H.P., 110 volt, 60 cycle, single phase A. C. or 32, 110 or 220 volt D. C. motor, with 42-gallon galvanized tank, base, water gauge, pressure gauge and connecting fittings. Suction and discharge, 3/4 inch.

Capacity 300 Gallons Per Hour

No. 909AT. Myers Self-Oiling Home Water System, with vacuum chamber, relief valve, air valve, pressure controller, endless belt and 1/4 H. P., 110 volt, 60 cycle, single phase A. C. motor, with 42-gallon galvanized tank, base, water gauge, pressure gauge and connecting fittings. Suction 1 inch, discharge 3/4 inch.

If frequency and voltage are other than specified above on motors, there will be an extra charge. Specify current used. If A. C., give phase, frequency and voltage. If D. C., give voltage.

Price on Application



Wheelbarrow Grass Seeder

This is really the greatest grass seeder made today. Not a toy, but a strong and durable implement specially designed and adapted to its use. It's easy—it weighs only 45 pounds. Does not throw the seed into the wind. Puts it on the ground lightly and evenly where it belongs, insuring the operator a good, even catch. Strong and durable. We know of Hudson Seeders which have been in use 30 years which are thoroughly good and effective today.

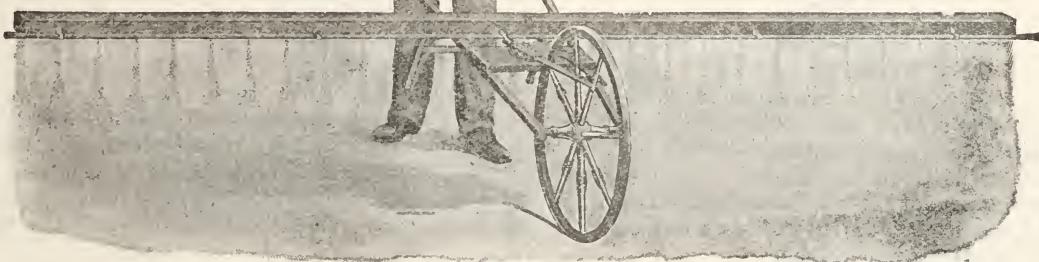
"NEVER MIND THE WIND—SOW ANY TIME"

Price on Application



WHEELBARROW SEEDERS

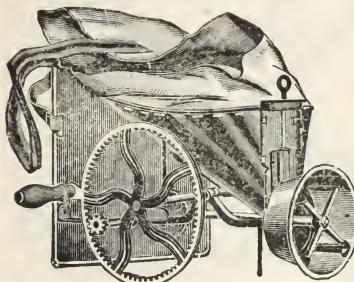
are a most valuable implement for sowing all grass seeds broadcast. The quantity of seeds sown per acre is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. For all sections where winds prevail, there is no machine made that will equal this implement for an even, accurate job of seeding. The quantity required per acre can be instantly changed by slipping a pin from one hole to another. These seeders run light and are not complicated. Seeds can be sown mixed or separate and in any quantity desired.



The Cahoon Broadcast Seed Sower

For Sowing Rye, Wheat, Oats, Barley, Buckwheat, Grass Seed, Etc.

This hand machine sows from four to eight acres per hour, at a common walking gait.



Barker Weeder, Mulcher and Cultivator

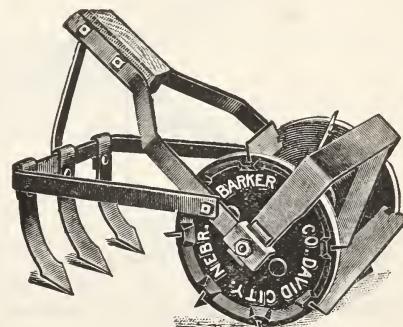
Judge the Barker Weeder, Mulcher and Cultivator on its merits, not on our say so.

Place a Barker in your garden, push it clear across the garden at a comfortable walk and you will have killed the weeds and formed a level, porous soil mulch over a strip six inches to twelve inches wide—depending upon the size machine you use. You get the weeds just under the surface as well as those showing on top—you don't miss any, you get 'em all.

How long would it take you to do this grade of thorough cultivation with a hoe?

The Barker destroys the weeds and forms a perfect soil mulch in one operation.

PRICE ON APPLICATION

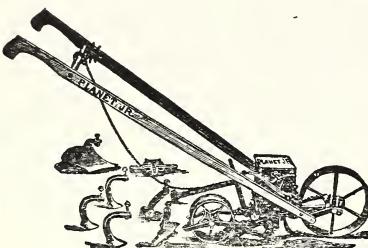




Planet Jr.



Farm and Garden Tools



No. 4

HAND SEEDERS

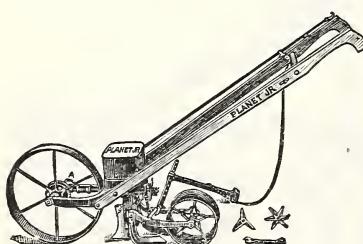
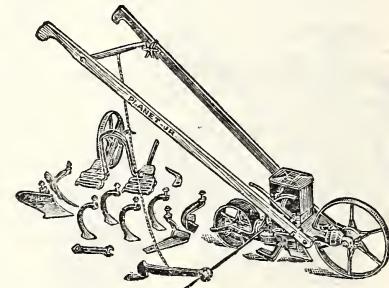
Planet Jr. Seed Sowers were first made in 1871. They were then, as now, the best in design, quality and usefulness. Since then they have been adopted and recommended by leading seed-men and seed growers. Their use has spread all over the world among market gardeners, general farmers, sugar beet and onion growers.

No. 4 Combined Hill and Drill Seeder and S. W. H.

The No. 4 is a combination of the most useful tool for a home garden. Plants almost all vegetable seed in continuous rows or in hills 4, 6, 8, 12 or 24 inches apart. A plow adjustable for depth opens a straight narrow furrow, the seeds are dropped in it, are covered and the soil firmed and the next row marked out all in the same operation. Converted into a Single Wheel Hoe by changing one bolt. Cultivating equipment includes the most useful attachments—hoes for weeding and shallow cultivation—cultivator teeth for deeper and general cultivation—and the plow for furrowing and ridging.

No. 25 Hill and Drill Seeder, Single and Double Wheel Hoe

“The Complete Gardener.” Plants practically all vegetable seeds at the proper depth in straight and narrow continuous rows or in hills 4, 6, 8, 12 or 24 inches apart. Easily changed into a double or Single Wheel Hoe. Attachments are those most needed—hoes for weeding and shallow cultivation—cultivator teeth for general and deeper cultivation and plows for furrowing, covering and weeding.



No. 3 Hill and Drill Seeder

Made for a market gardener or farmer who has a good sized garden. Hopper holds three quarts—enough to plant about one-quarter acre in seed. Plants practically all vegetable seeds in straight narrow continuous rows or dropped in hills 4, 6, 8, 12 or 24 inches apart. Marks the next row at the same time. Seed control and shut off located at top of handle, making easier operation.



The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase “Prices are subject to change without notice.”

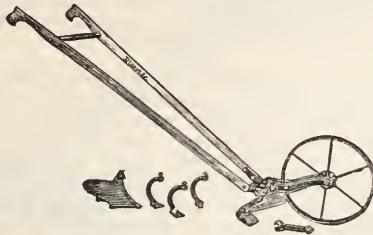


Planet Jr.



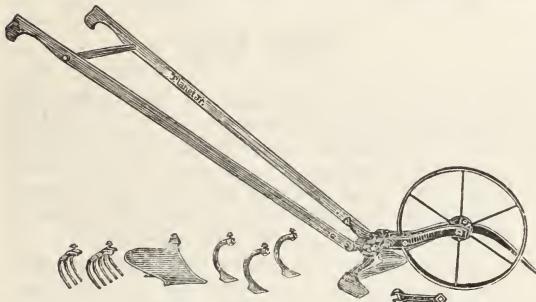
Farm and Garden Tools

No. 17 Single Wheel Hoe



Very popular because equipment includes just the attachments needed in the average garden. A pair of 6 inch hoes for weeding and shallow cultivation, three cultivator teeth for deeper and general cultivation and a plow with land side for hilling, furrowing, ridging and plowing. Light and easy to handle. All steel—unbreakable.

No. 16 Single Wheel Hoe

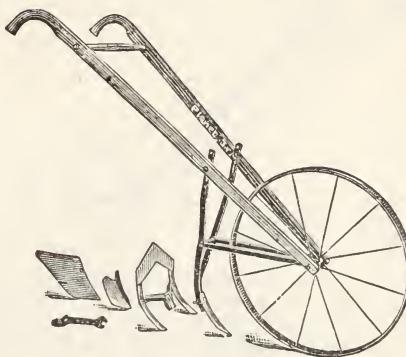


Equipment very complete, including one pair 6 inch hoes for weeding and shallow cultivation, three cultivator teeth for general and deeper cultivation, one plow with landside for hilling, ridging and plowing, one 3 tooth and one 5 tooth rake for fine close cultivation and one leaf lifter which is useful in protection over hanging leaves and vines. An ideal machine for the family garden.

No. 13 Double Wheel Hoe, and Single Wheel Hoe

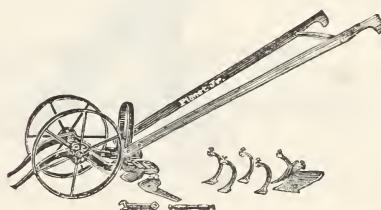
Equipment includes one pair of 6 inch hoes for weeding and general cultivation. Made for those who want to select their own cultivating equipment. As a Double Wheel Hoe it will straddle rows 20 inches high and cultivate both sides at once. Easily and quickly changed to a Single Wheel Hoe for working between rows.

No. 119 Garden Plow



A sturdy and inexpensive garden plow and cultivator. For those liking the high-wheel this tool is the favorite. Equipment includes a large plow, a scuffle blade and three cultivator teeth. Due to the high center of gravity this tool pushes very easily.

No. 12 Double and Single Wheel Hoe



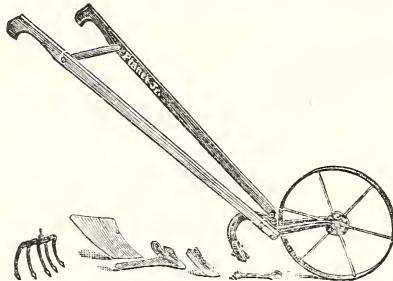
Equipment includes attachments needed in the average garden. One pair 6 inch hoes for shallow cultivation and weeding, four cultivator teeth for deeper and general cultivation and a pair of plows for plowing, furrowing and ridging and a pair of leaf lifters which are useful in protecting the leaves and vines when crops are maturing. As a Double Wheel Hoe it will straddle crops 20 inches high, cultivating both sides at once. Easily changed to a Single Wheel Hoe for working between rows.



Planet Jr.

Farm and Garden Tools

No. 19 Garden Plow

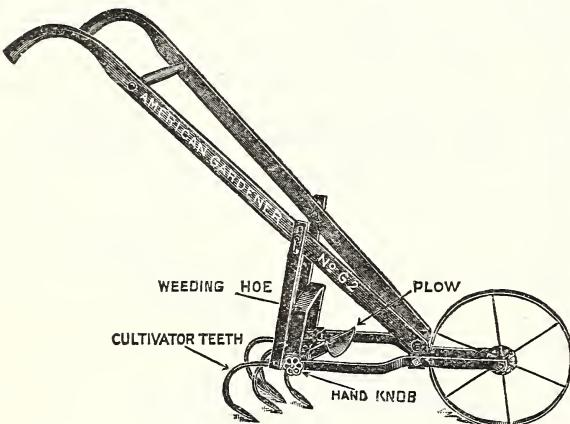


An inexpensive yet sturdy garden plow and cultivator for the home garden. Attachments consist of plow, cultivator tooth, sweep and a five-prong cultivating attachment for fine work. Handles are adjustable for height.

Here is a real rugged, built-for-service tool, especially designed for the farmer's home garden and vacant lot farming where an extra strong, all-purpose tool is needed. An inexpensive tool, but mighty dependable and effective.

The slotted standard (S-37) regulates depth of work, and with an adjustable washer, carries the attachments that go with the No. 19. The plow marks out, furrows, covers, plows to or from the crop and "hills up." The cultivator tooth does deep work; loosens soil, marks out rows for plants, onion sets, etc. The five-prong cultivator (S-94) is used for both deep and shallow cultivation; breaks the surface up fine and leaves a good mulch to hold moisture. Remove S-37 standard and bolt S-94 in its place. The wide sweep cuts under the surface, destroying all weeds, and giving effective shallow cultivation. The handles adjust for any size operator; runs lightly enough for woman or child to use.

True Temper Geneva, Quick Adjustable Cultivator



Packed one in a carton—Handles bundled.

Shipping weight, 21 pounds.

Attachments: 1 No. 212 thin blade scuffle hoe or sweep.

1 No. 213 trenching plow or shovel 4½ inches wide.

5 heavy strong cultivator teeth attached to the revolving head.

Finish: Handles—Varnished.

Metal parts—Black and green.

No. G2

Is recognized everywhere as the only real quick-adjustable cultivator on the market. It has a weeding hoe, a plow and five cultivator teeth, all permanently attached to a revolving steel plate. Any of these tools may be securely locked into working position by a few turns of the hand wheel—a time and labor saver.

Machine has steel forged tools, well selected oak handles, with comfortable handle grips.

It has 14-inch steel wheel and is finished in colors, then varnished.

Plow and furrow opener comes as extra attachment.

The tool is one of the latest design in cultivator manufacture and is recognized as a reliable, quick adjusting tool. It combines three practical cultivating tools attached to one head. A few turns of a handwheel releases the head allowing it to revolve in order to place any of the three tools in position for use. There are no lost attachments to look for. It is a time and labor saver; is easily handled and will stand a lot of hard use. The handles are of selected oak with bent plow grips and are easily adjusted to the height of the operator.



Planet Jr.

Farm and Garden Tools

No. 300 PLANET JR. DRILL SEEDER. "For all Soils." The No. 300 has many new features in a drill seeder that make it very valuable for large growers, particularly those who plant on muck or in sandy soils, and at the same time it will give A-1 service in all types of soil.



IMPORTANT FEATURES

Broad Tread Wheels: Front and back. Make it easy running and prevent sinking in muck or sand.

A plate or disc seeder for all seeds from the smallest up to and including peas, beans and corn. Growers of peas and beans will appreciate this seeder as it does not break the seed and sows with great regularity. Only three plates each with thirteen holes, making ample adjustment for various seeds. Hopper holds four quarts and is removable which makes easy filling and emptying. Net weight, 36 pounds.

Planet Jr. No. 220 Fertilizer Distributor

SAVES TIME, LABOR—PRODUCES BIGGER CROPS

Packed weight, 120 lbs.; net weight, 65 lbs.

The No. 220 will distribute fertilizer in the middles of three rows 12 to 14 inches apart; it will side-dress one side each of two rows up to 36 inches apart (one complete row; and corn in wider rows). You can use it in very narrow rows—as close as 9 inches. You can use it in 42 to 48-inch rows by closing off the flow in three spouts and distributing through the other three—either on the right or left hand side.

The No. 220 spreads fertilizer from 4 to 30 inches on the ground. The hopper capacity is one bushel and the weight of the load is placed over the wheel, making it easy to push. The No. 220 will distribute 100 to 2,000 pounds of commercial fertilizer to the acre. Quantity per acre is regulated by a notched index on the right hand handle. The shut-off rod is operated from the same point.

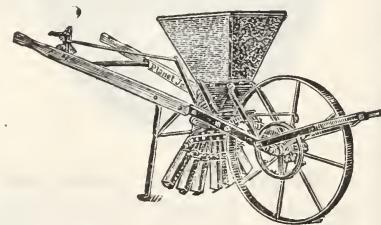
The sloping hopper bottom is the agitator for the fertilizer and is operated by heavy lugs on the 24-inch drive wheel. Full, positive oscillation is insured no matter what quantity per acre you are distributing—as compared with a distributor where the oscillation (backward and forward action to keep the fertilizer flowing evenly) decreases when the quantity distributed per acre is decreased. The outlet is regulated independently of the agitator and oscillation is 100% whether distributing 100 or 2,000 pounds per acre.

The simplicity, efficiency, and long wearing qualities of the No. 220 will appeal to everyone. No chains, gears, or canvas belts to break, rust, tear, or stick.

The 6 spouts are easily and quickly adjusted. They are held against a guide plate by spring pressure and are adjusted without turning bolts or screws. A stop bolt is used on notched index plate to insure pulling shut-off rod back to the same notch used before shutting off at end of finished row. A draft hook is attached to front where additional power may be used when desired. A feed gate located directly behind the openings into the spouts can be regulated to fill only the center tubes, to fill all tubes, or to fill two or three tubes only—on either the left or right side.

There are no wearing parts, except the steel piece that operates on the agitator lugs on the drive wheel, and it can be renewed.

The first important point that you want to consider in connection with a Fertilizer Distributor is that it saves fertilizer, saves time and labor, produces bigger crops that you can market earlier, for better prices. When you measure the years of service you can expect from the Planet, Jr. No. 220 against its initial cost, you will readily see that it is an investment that every market gardener and trucker ought to make without delay.



No. 220

Greater Value In Diamond Tires and Tubes



Ever since pneumatic automobile tires have been built, Diamond tires have been preferred by experienced motorists. They are not supplied to automobile manufacturers as original equipment, yet more than 27,000,000 Diamonds have faithfully served motorists who have had experience with other brands!

And today, as always, Diamonds are tires of merit and distinction from the top of that famous non-skid tread design to the innermost cord!

Furthermore, Diamond tires cannot be exceeded in value because of mass production, economical distribution and our large scale buying!

Regardless of the methods used in selling or distributing any make of tires, there are no better values than those presented below.

Diamonds are today supreme values in the field of fine tires.

Only large scale production methods—plus economical distribution—could provide such outstanding values. No retail organization, regardless of enormous size or methods of selling, can surpass the tire values we are able to offer you in DIAMONDS.

And you know you have fine quality tires when you rely upon DIAMONDS! For more than a third of a century DIAMOND tires have been giving dependable service to the motorist who chooses his own tires!

No greater tire values can be offered! Large quantity buying direct from the manufacturer, efficient, low cost selling and distribution, bring these tires of known merit and distinction to you at the lowest prices ever before offered for regular sale.

Cleveland Tire Chains

The POPULAR endless type chain which has been in use for years. Genuine case hardened cross chains. A fastener that takes up slack and does not come unfastened. Rust proof side chain.

Also for PNEUMATIC TRUCK tires this chain is preferred by many fleet owners. Big, stout cross chain, strong side chain, extra heavy hooks. Our Security patented fastener which is the finest on the market and has three inches of take-up makes your chains fit snugly and stay on.



Prices on Application

The New Oliver Two-Way Tractor Sulky Plow

It is designed to meet the peculiar needs of hillside and irrigation farming. Back ridges which retard the flow of water in irrigated fields are avoided by the use of this new plow. It gives the full advantage of tractor power in irrigated fields and on hillsides where it is desirable to plow back and forth across the field, using alternately a right and left hand bottom. Its work on hillsides is extremely efficient because it never

drifts. This is prevented by running in the furrow, the wheel next to the bottom that is plowing. Thus a uniform depth and width furrow slice is assured at all times. Great strength fits this plow for working in stony land or under other adverse conditions.

It is truly a one-man outfit, simple in construction and easily operated.

Outfit Can Be Backed

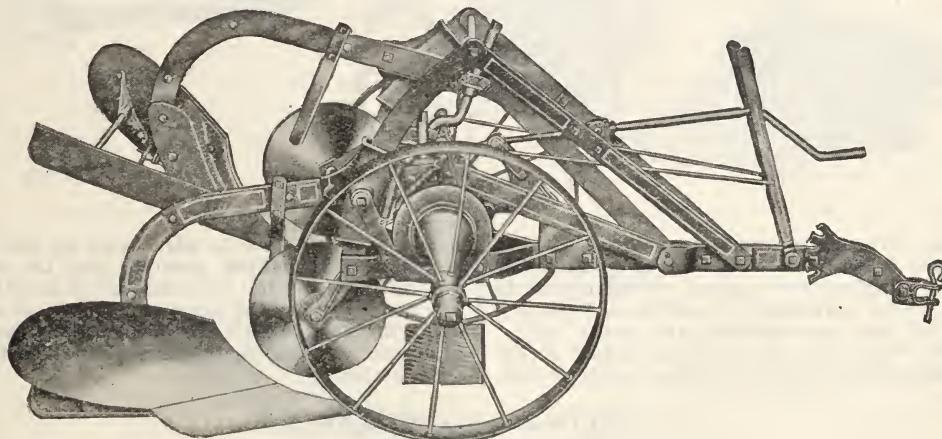
The hitch on this new plow is fastened to the end of the extension on the beams, making it possible to back the outfit a reasonable distance.

This is especially advantageous when turning on narrow headlands where it is necessary to back the plow to make short turns.

Individual Power Lifts

There are two dependable and quick-acting power lifts—one for each bottom. These lifts operate only when raising the bottom. Their

action is positive, raising the bottom in a short space of travel without the aid of lifting springs. Independent trip rods control each lift.



Raise Both Bottoms at Once

The bottoms can be raised independently to the same height regardless of plowing depth, or both can be raised at the same time. When a bottom has reached full height the lift locks, holding it in raised position, allowing sufficient clearance

for transporting. When the lift is tripped to lower either bottom that bottom quickly reaches full plowing depth while the other bottom remains raised.

Easily Controlled From the Tractor Seat

All field adjustments on this New Oliver Plow can be made easily and quickly from the tractor seat with the outfit moving or standing still. Plowing depth of both bottoms is regulated by means of a powerful, ball bearing screw control. Unlike a lever, the screw is always in the same convenient position, handy for the operator to

reach. It is not even necessary for him to turn his head to locate or adjust this control.

Individual trip rods controlling the power lifts are as accessible as the depth adjusting screw. It requires only a slight pull on the trip rods to either raise or lower the bottom.

Sturdy, Strong Construction

The rigid frame on this new implement embodies ample strength to give long life even under the most adverse conditions. The beams are made of flat bar, high carbon steel. They are reinforced by an extra piece riveted on at the

bend and following the curvature of the beams to the second bolt of the standard.

The heavy steel axle is $1\frac{1}{8}$ inches in diameter. Heat-treating further strengthens the beams and axle, reducing to minimum the possibility of banding or breaking.

Extra Long Bearings

The bearings in the wheels are extra long, assuring long life, light draft and straight running wheels. Positive lubrication is furnished through

the using of the hub caps as compression grease cups.

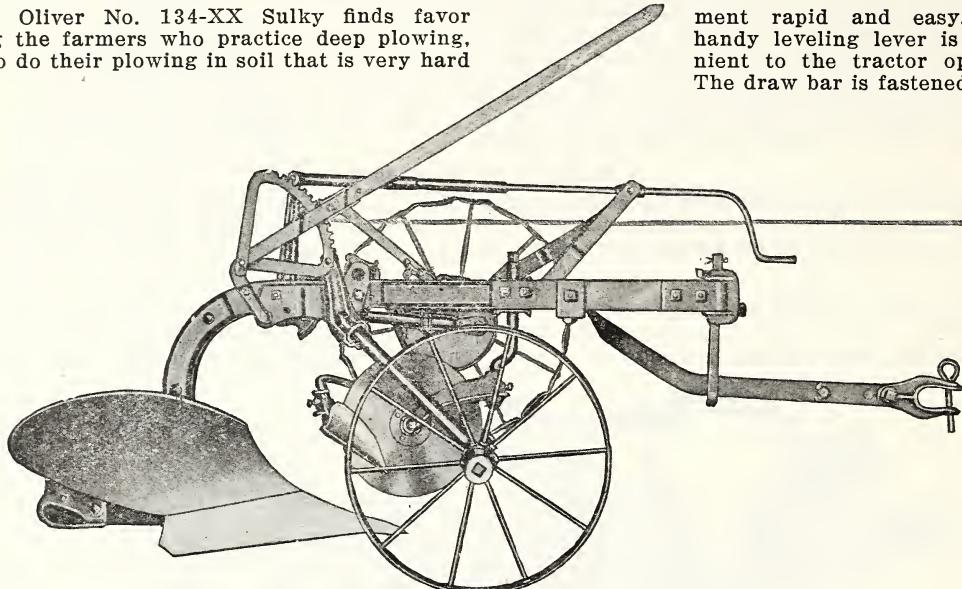
Bases to meet a wide variety of soil conditions can be had for use on this new plow.

Oliver No. 134-XX Tractor Sulky Plow

A PLOW FOR FORDSON TRACTOR, WITH 16-INCH BASE

The Oliver No. 134-XX Sulky finds favor among the farmers who practice deep plowing, or who do their plowing in soil that is very hard

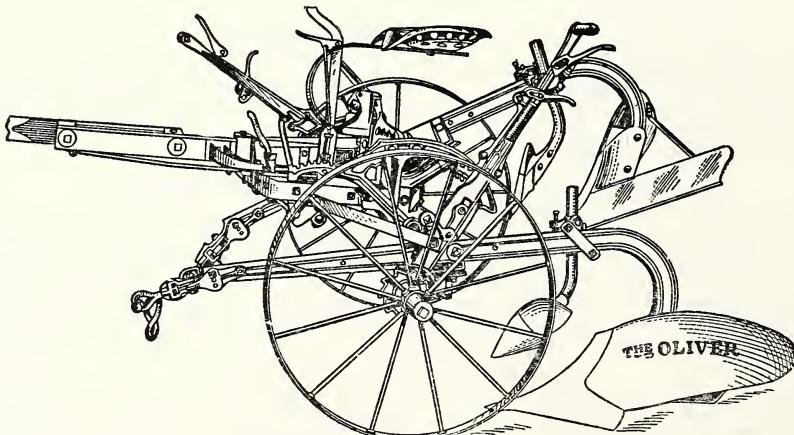
ment rapid and easy. The handy leveling lever is convenient to the tractor operator. The draw bar is fastened at the



or weedy. The improved construction of this new Oliver Tractor Plow has made possible an extremely simple plow of great strength that is notable for its convenient operation and quality work. All field adjustments are easily made. The powerful action of the ball-bearing screw multiplies human effort and makes depth adjust-

center of draft, and is adjustable up and down and sidewise, making possible just the correct line of draft and the right degree of penetration. The draw bar has the same wide range of adjustment, fitting this plow for use with any standard light tractor. The 3-ply, heat-treated beams are extra strong.

REVERSIBLE SULKY PLOW



There are certain conditions in which it is necessary to be able to plow back and forth one side of the field, using alternately a right and left hand bottom. The Oliver No. 23-A Reversible Sulky provides farmers with a means of doing this kind of work with minimum effort. By means of a horse lift, operated by a foot trip, the operator can keep his eyes on his team and his

hands on the reins. Adjustable bail block adapts the No. 23-A Sulky for three different sizes of bottoms. Through this adjustment, it is possible to keep the plow in direct line of draft, eliminating side strain on the beams. A guiding lever permits perfect line of draft, when the change of bottom is made. The Oliver No. 23-A Sulky is equipped with steel mouldboard.

Price on Application

OLIVER PLOWS

Nos. 42 and 43 Steel Beam Plows



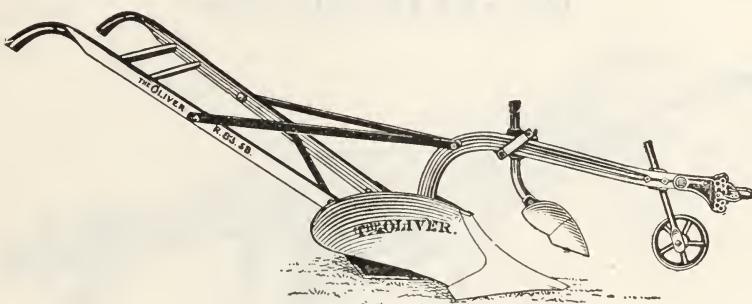
The turning and pulverizing shape of the mouldboard at the top and its bluffness in front make this an easy scouring plow, and it can be used to good advantage on level or rolling land, either sod or stubble. The beams are steel, with high arch for trashy clearance. The renewable land-

side shoe and chilled share make a plow that always runs with the proper suck and wing, no matter how long it may be in use.

No. 42. Medium two-horse plow. Capacity, 7½ inches deep, 13 inches wide.

No. 43. Large two-horse plow. Capacity, 8½ inches deep, 15 inches wide.

Nos. 82, 83 and 84



This series of plows is designed for those sections where a general purpose plow is needed to turn sod, raw land, clay and sand, and gravelly, stony soil. The long, curved mouldboard turns the deep furrow slice completely over, covering trash. The plows are steady running, light in draft, easily handled and heavily braced. This series of Oliver plows is made with steel mouldboards.

No. 82. Light two-horse plow. Capacity, 6 x 12 inches.

No. 83. Medium two-horse plow. Capacity, 7 x 13 inches.

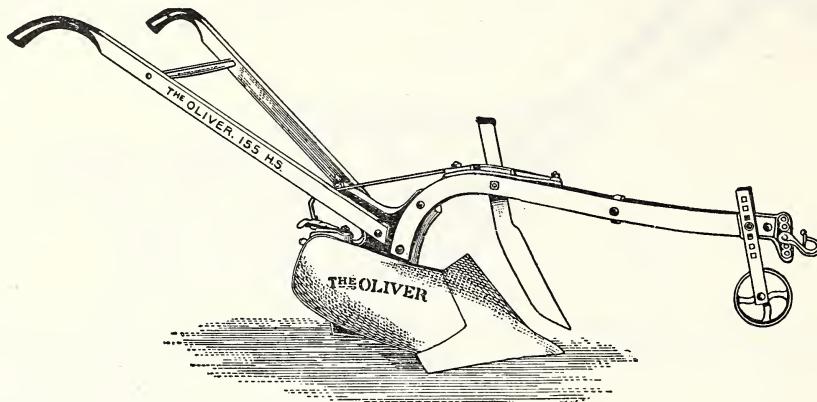
No. 84. Large two-horse plow or medium three-horse plow. Capacity, 8 x 15 inches.

PRICE ON APPLICATION

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Oliver Hillside Plows

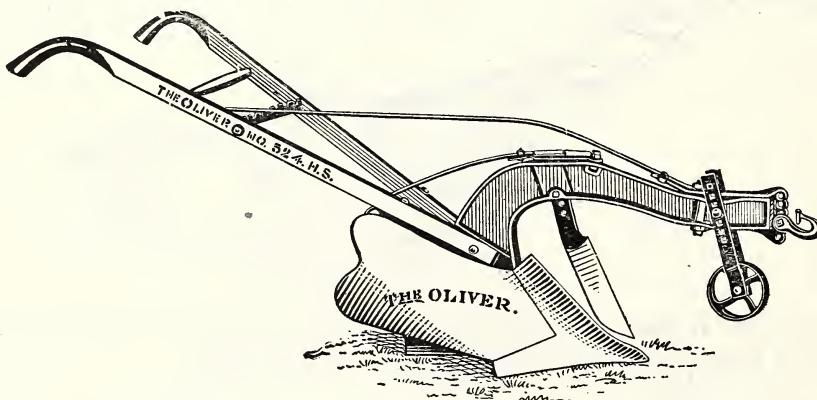
No. 155 Hillside Plow



This plow meets the demand of a light one-horse hillside plow. It is equipped with a hardened steel mouldboard and chilled shares. The mouldboard brace is separate and can be renewed without replacing the

entire bottom. Mouldboard locks automatically, making it a very desirable plow for small farms, as it will work equally as good on sod as stubble.

No. 524 Hillside Plow

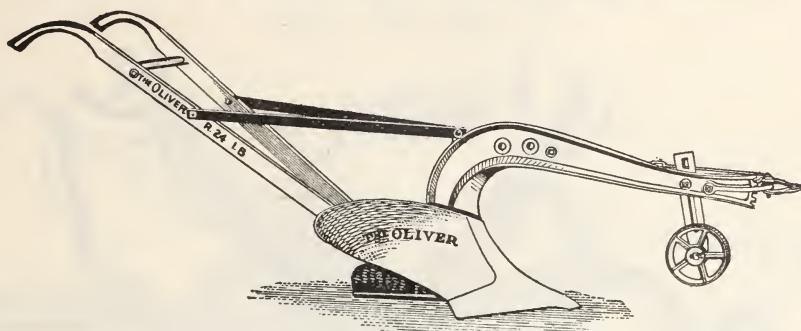


The Oliver series of hillside walking plows is built for use in hilly country and other places where it is desirable to plow back and forth across the same side of the field, without laying out lands. The Oliver No. 524, because of its lightness of draft, strong construction, and adaptability to both hillside and level field work, has found great favor with the farmer. The No. 524 is equipped with a steel mouldboard and

chilled share. Its automatic hanging cutter is always in line with the cutting edge and gives satisfaction. A steel lever shifting clevis regulates the width of furrow. Shifting of the bottom is made easy by a conveniently placed foot lever. The Oliver No. 524 is regularly equipped with a gauge wheel. It has a capacity of 8 inches deep by 15 inches wide.

PRICE ON APPLICATION

Oliver Road and Grading Plow

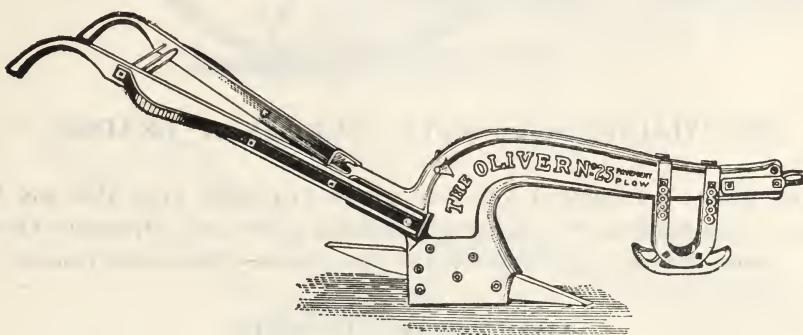


NO. 24

The "Good Roads" movement which is now nation-wide is causing a great demand for road plows. For certain types of road work there is no better implement than the Oliver No. 24 Road and Grading Plow. This plow will break the hardest roads, as it is sturdily built. It can be used with horses or light tractors. The chilled

mouldboard is long and deep for breaking the soil into lumps. The chilled cutter share is of a special deep suck type to insure penetration. Hanging coulter, jointer, gauge wheel or gauge share furnished extra on order. The capacity of the Oliver No. 24 is 7 in. deep by 14 in. wide.

Oliver Pavement Plow



The Oliver No. 25 Pavement Plow

"THE PLOW FOR THE CONTRACTOR"

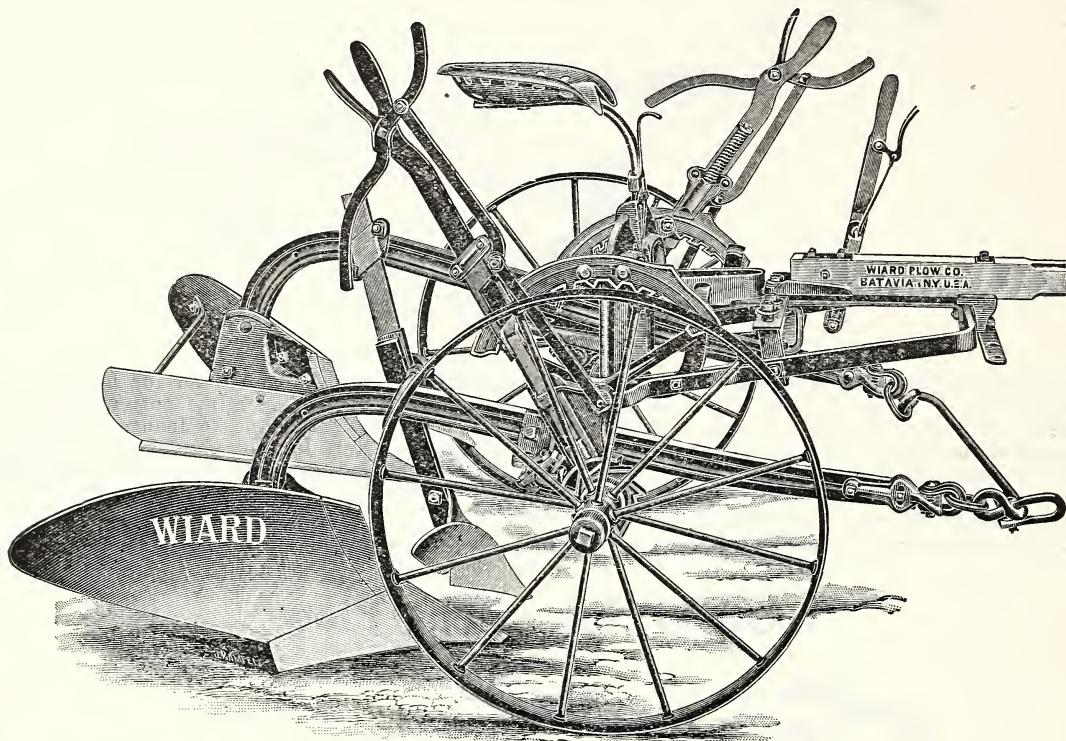
Contractors demand a plow like the Oliver Pavement Plow. It does the work and saves time and money. Note the adjustable and double reversible, crucible, self-sharpening spike steel point, the hanging adjustable gauge shoe with chilled wearing parts, the well-braced handles with loop handle wear irons, and its massive beam with extremely heavy upper and lower flanges, insuring plenty of strength. The point is made of the

highest grade of steel, and being double reversible gives the maximum of service. This plow is as strong as it looks. It is built for a purpose, namely, to give the contractor a tool that will stand up under all kinds of hard work. The Oliver Pavement Plow is precisely the tool for breaking cobblestones, pavement or any unusually hard ground.

PRICE ON APPLICATION

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

The Wiard Reversible Sulky Plow



THE WIARD SULKY PLOW ALWAYS A LEADER

The Wiard (New Model) Reversible or Two-Way, Power Lift Sulky Plow (lift and trip operated by hand or foot), with Shifting Pole, Automatic Shifting Clevis and Adjustable Tilting Seat and Steel Wheels. No. 400—Two or Three-Horse—Weight 550 Pounds.

ADAPTED TO ALL SOILS

The Reversible or Two-way Sulky, is adapted to work in all soils, especially where the plowing is difficult, rough and uneven. For plowing flat land it is desirable to turn the land all one way, leaving no ridges or dead furrows. For work on side hills the soil can be worked all in one direction, and the plow by use of the levers can be levelled, and the seat can be tilted so that the driver avoids all discomfort.

As shown in the illustration, there are two plows, one right and one left hand, each operated by separate levers and having an automatic power lift which can be operated by the driver from the seat, either by the use of a trip lever operated by the foot, or by a hand lever which can be operated by the driver either when riding or walking. The plows have the highest grade soft-center steel mouldboards.

The Nos. 43, 103, 44 and 104 plow bottoms can be easily adjusted independently of the beam so that they will take more or less land as required, and when properly set the plows will run in a direct line, thus relieving all side strain on the horses' necks, hence it is not necessary to use the pole shift except in extreme cases.

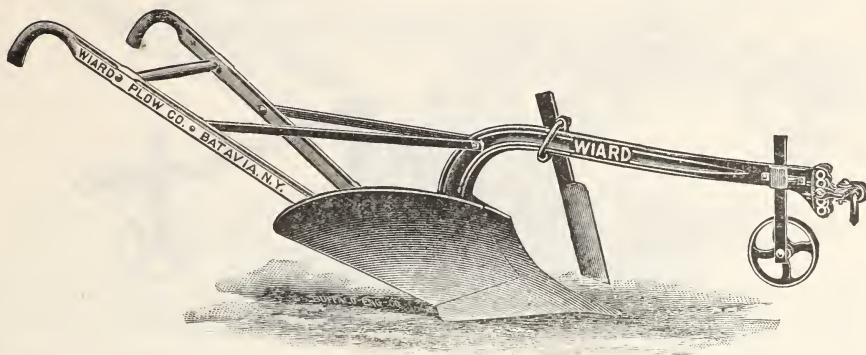
The device for adjusting the plow bottoms consists of a sliding wedge between the beam and plow standard, which can be adjusted very easily by loosening the bolts which hold the beam to the plow standard.

The sulky is perfectly balanced, so that whether the operator is on the seat or following the plow there is absolutely no weight on the horses' necks.

Price on Application

Wiard Steel Beam Plows

Nos. 43 and 44



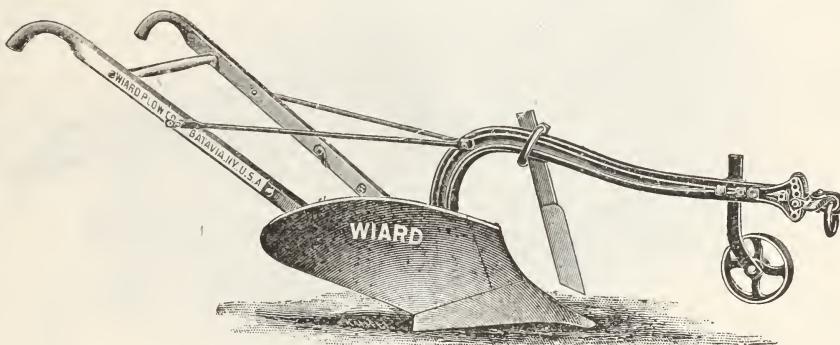
These plows are equipped with channel steel beams, highest quality, soft-centered steel mouldboards, "which is the strongest and most durable steel mouldboard made," adjustable handles, steel wheel standards.

Can be furnished with either jointer or coulter.

No. 43. Capacity, 5 to 7 inches deep, 10 to 13 inches wide.

No. 44. Capacity, 6 to 8 inches deep, 12 to 15 inches wide.

Nos. 524 and 526



The turning qualities of this shape of mouldboard are unequalled for plowing level or rolling land, sod or stubble. Equipped with soft-centered steel mouldboards, channel steel beams, coulters or jointers.

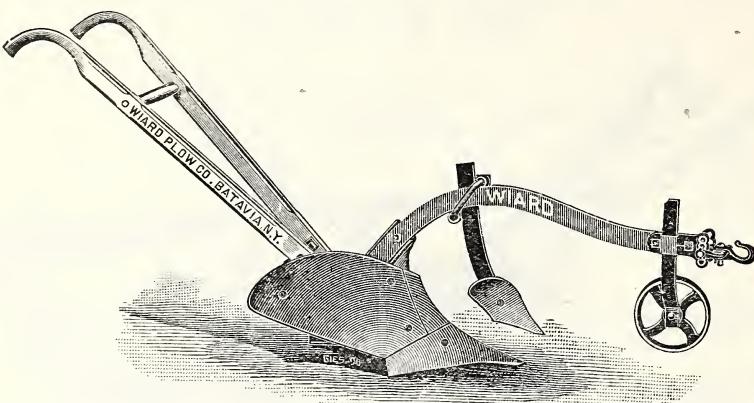
No. 524. Medium two-horse plow. Capacity, 6 to 7 inches deep, 9 to 13 inches wide.

No. 526. Large two-horse plow. Capacity, 7 to 8 inches deep, 10 to 15 inches wide.

PRICE ON APPLICATION

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Wiard Steel Beam One-Horse Plow



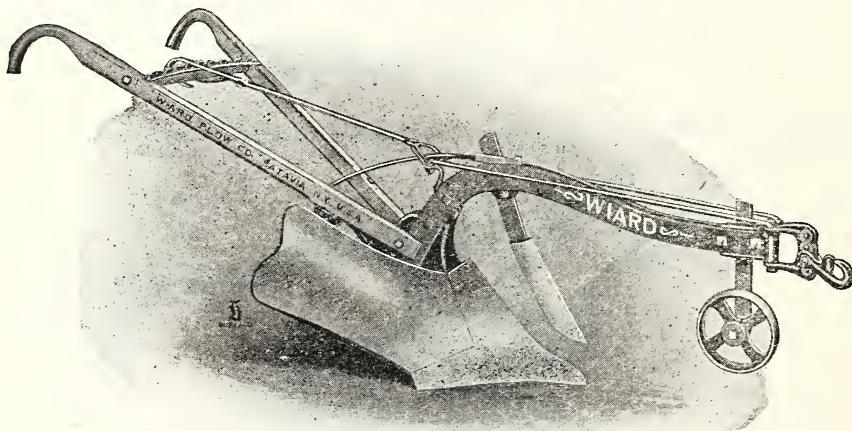
NO. 74

This very light, strong, durable plow is fitted with forged steel, one-piece beam, set for horse to walk in furrow. Equipped with steel mouldboard, adjustable jointer or coulter, white oak

handles, adjustable sidewise, also can be raised and lowered.

Weight, 87 pounds. Capacity, 5 to 7 inches deep, 6 to 11 inches wide.

Wiard Steel Beam Swivel Plow



NOS. 120 AND 126

Steel Mouldboard, Rigged with Jointer or Coulter

The illustration shows the shape and general construction of the Wiard reversible side hill plow—a little the best side hill plow we have ever seen.

No. 120. Light two-horse plow. Capacity, 5

to 8 inches deep, 10 to 13 inches wide. Weight, 118 lbs.

No. 126. Heavy two-horse plow. Capacity, 5 to 8 inches deep, 12 to 15 inches wide. Weight, 139 lbs.

SPECIFICATIONS AND DESCRIPTIONS

Beam—Forged steel, two pieces.

Mouldboard—Soft center steel, highly polished.

Saddle for Mouldboard—Malleable iron.

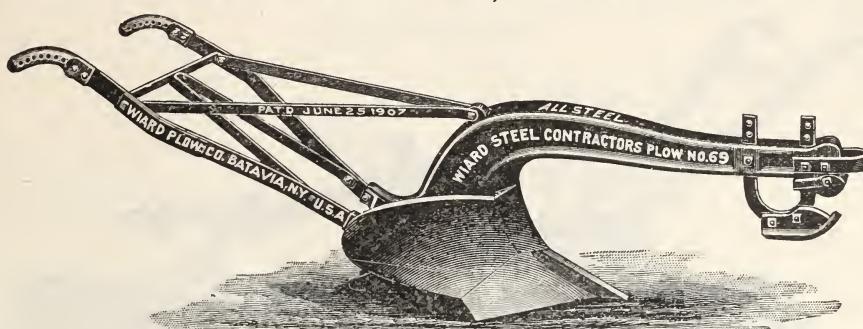
Shoe—Cast iron, chilled on bottom.

Coulter or Jointer—Adjustable, automatically shifted when mouldboard is reversed.

Handles—White oak, natural finish.

Price on Application

No. 69 Wiard (All Steel) Contractor's Plow



This plow is intended for use with either animal power, a traction engine or road roller. Weight, with clevis, 315 pounds.

We guarantee the steel beam on this plow against breakage for one year from date of sale.

This plow is very simple in construction, consisting of only nine parts aside from the braces and bolts. For all road or contractor's work for tearing up cobblestones and macadam, it can be used as a perfect rooter and pavement plow by simply removing the steel wing below the mouldboard, thus making a two-in-one-plow for all-around work. Ordinarily, the contractor has one plow for general purpose or furrow work

and another plow for rooter work or tearing up old pavements. This No. 69 does the work of both and answers for any and all purposes.

We would also call special attention to the main plow point. This point is made from a solid bar of forged steel $1\frac{1}{4}$ inches thick, insuring great strength. It can also be reversed end for end, thus giving double wear.



No. 69 Main Point

SPECIFICATIONS

Beam—One solid piece of cast steel.

The Landside is formed by this reversible point, which has countersunk bolt holes on both sides, into which bosses of steel beam fit, holding it most securely in place, protecting the bolts and preventing the possibility of their shearing off.

Wing for Point—A forged steel plate, extra strong and heavy.

Mouldboard—A heavy plate of steel, made extra thick at places where most wear comes.

Shin Piece—Above the point and in front of the mouldboard to protect it.

Shoe or Heel—At rear end of plow under heel of point to protect it and also gives pitch to the plow.

Handles—All steel (patented). They have the strength and will stand the racket and don't break or bend.

Clevis—Forged steel, made to wear and stand the strain.

Price on Application

The Sargent No. 76 Plow

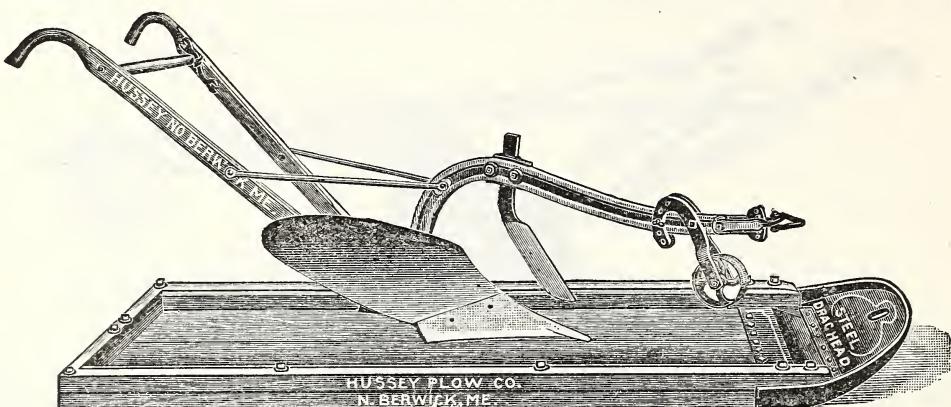


This series has proved very popular in New England. They are light weight, of good capacity and handle easily. These plows are made with steel mouldboard.

76A. Medium Two-horse, Cast Share, Steel Board.
76B. Light Two-horse, Cast Share, Steel Board.
76C. One-horse, Cast Share Chill Board.

Price on Application

Hussey Plows



These plows are very strongly built, have the regular "Hussey" shaped mouldboard, which is so much liked by New England farmers, are

made of the best materials throughout, are easily held, and are as nearly complete and satisfactory in every respect as the most critical can ask.

No. 26. LARGE TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point. Cuts from 6 inches to 8 inches deep, 13 inches to 16 inches wide. Weighs, complete, 128 lbs.

No. 28. LARGE THREE-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point. Cuts from 7 inches to 9 inches deep, 14 inches to 18 inches wide. Especially adapted for breaking up new land. Weighs, complete, 162 lbs.

No. 100. (Wood Beam.) ONE-HORSE PLOW. Cuts from 5 inches to 6 inches deep, 10 inches wide. Weighs, complete, 66 lbs.

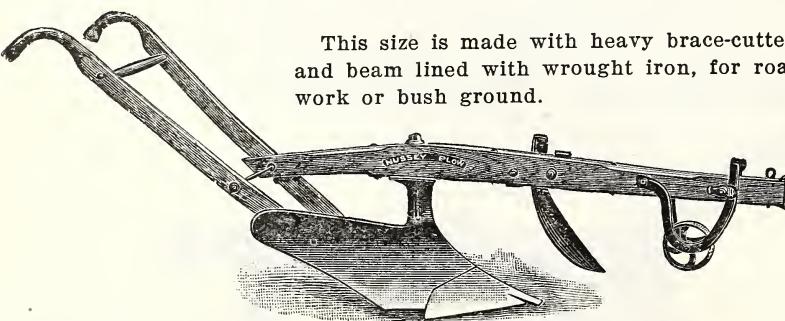
No. 102. (Wood Beam.) LIGHT TWO-HORSE

PLOW. Cuts from 5 to 7 inches deep, 12 inches wide. Weighs, complete, 82 lbs.

No. 104. MEDIUM TWO-HORSE PLOW. Cuts from 7 inches to 8 inches deep, 16 inches wide. Weighs, complete, 111 lbs.

No. 106. LARGE TWO-HORSE PLOW. Cuts from 7 inches to 9 inches deep, 16 inches wide. Weighs, complete, 124 lbs.

No. 108. (Wood Beam.) HEAVY ROAD OR BUSH GROUND PLOW. Cuts from 8 inches to 10 inches deep, 18 inches to 20 inches wide. Weighs, complete, 190 lbs.



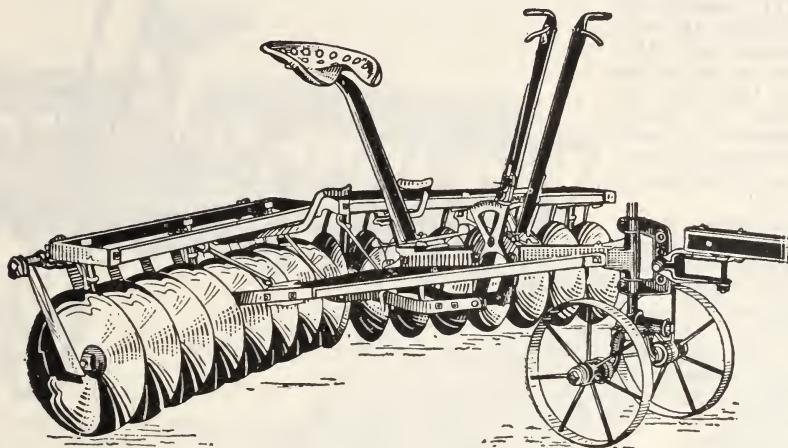
WOOD BEAM HARD METAL PLOW

Price
on
Application

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Oliver Disc Harrow

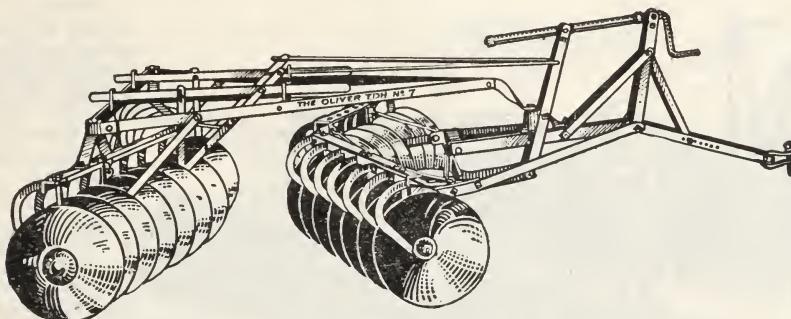
WITH FORE TRUCK



On the Oliver "A" series disc harrow the gangs can be set at any angle for proper penetration of different soils. Just the right degree of disc curvature enables the discs to pulverize the soil to the desired depth. High quality spring steel scrapers are controlled by foot levers. Slat and control levers are so placed that the

driver can be comfortable and at the same time adjust the gangs easily and conveniently. Frame, constructed from angle steel, is sufficiently large to make it strong and durable. The Oliver "A" Harrow is furnished in sizes cutting 6 feet wide with 16 or 18-inch discs.

Oliver Tractor Disc Harrow



SPECIAL 6 FOOT SIZE FOR FORDSON TRACTOR

No farm equipment is complete without a good disc harrow. The best plowing only partially prepares an ideal seed bed. The Oliver TDH is specially designed for use with any standard light tractor. Its construction permits all four gangs to be set at more or less angle from the tractor seat without the use of a lever and without backing the harrow. All changes are made quickly and easily by means of a screw crank adjusting device accessible from the trac-

tor seat. The gang connection pivot, being higher than point of pitch, converts the forward pull of the tractor into a downward pull on the gangs. This feature, together with the fact that the gangs can be set at a wide angle, assures ready penetration. The Oliver TDH Harrow can be furnished in 6, 7, and 8 foot sizes with either 16 or 18 inch discs. Weight pan furnished as an extra.

Price on Application

Massey-Harris No. 28 Three-Lever Disc Harrow

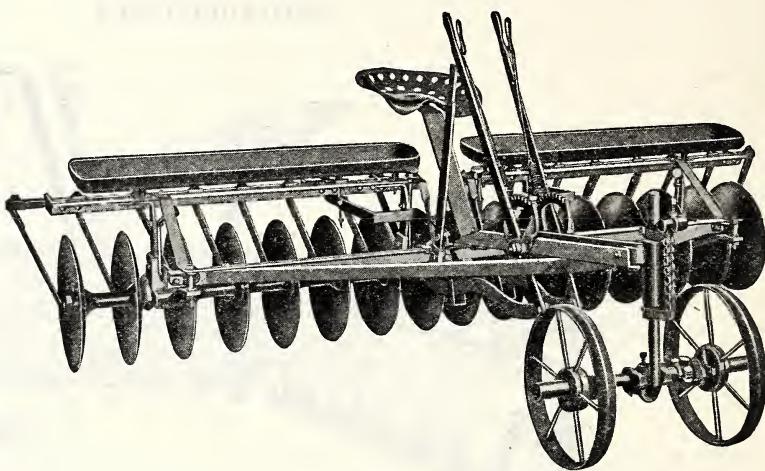
Both durability and efficiency are strong features of this harrow, as a glance at the illustration will immediately suggest. Throughout the construction particular attention has been given to all of the details, even to the bolts, every one of which that would have any tendency to work loose is provided with either a cotter pin or a lock washer to keep its nut tight.

Large convex center bumpers at the inner ends of the gangs successfully counteract the end thrust. When the harrow is at work, these bumpers roll on one another in the direction in which the soil is turned and take up all of the end pressure, relieving both the bearings and the frame from all strain.

A convenient hand pressure lever, fitted with a foot latch, controls the depth of cutting of the center discs. The discs can thus always be made to cut at a uniform depth, even when straddling knolls or furrows.

The standards are in three pieces, which facilitates the making of repairs, and are fitted with oil soaked, split hardwood bearings, which wear long and minimize the friction. The bearings are dirt proof and are lubricated by means of hard oil grease cups. Adjustable hoe steel scrapers, controlled by conveniently placed foot levers, are provided for cleaning the discs.

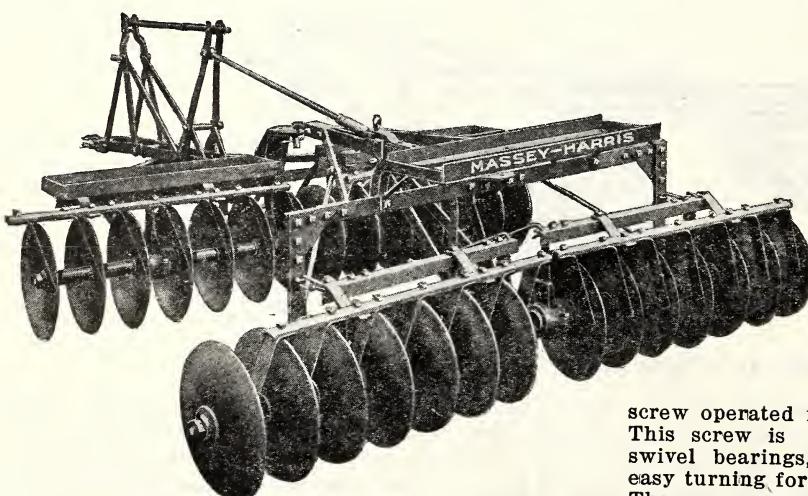
Price on Application



Size, 6 feet, with either 16-inch or 18-inch discs.
Long pole can be supplied in place of tongue truck if wanted.

Massey-Harris No. 30 Tractor Double Disc Harrow

Built Specially for Use with the Fordson Tractor, but Suitable for Tractors of Other Makes



Sizes 6 feet, 7 feet and 8 feet, with either
16-inch or 18-inch discs.

Strength is prerequisite to the success of any implement that is intended for use behind a tractor, and in the Massey-Harris No. 30 Tractor Double Disc Harrow that essential qualification has been given first consideration. This implement is designed purposely to supply a first-class harrow for tractor use and is well adapted to the rugged service incident to power farming.

Both sets of gangs are controlled by a crank screw operated from the tractor platform. This screw is mounted in self-aligning swivel bearings, which insures free and easy turning for all positions of the gangs. The rear gangs can be adjusted to cut at a different angle from the front ones if so desired.

There is plenty of clearance for the frames, and the entire harrow is so built that the gangs have ample flexibility. Simple adjustments are provided for controlling the depth of cutting, and the rear gangs can be readily disconnected from the front ones if it is ever desired to use only a single harrow.

From the tractor back to the rear gangs the draft is in almost a straight line. Consequently, the harrow draws better, there is less wear on the standards, and better work and longer life result. Lathe-turned spools, with hardwood boxes, are used for the bearings.

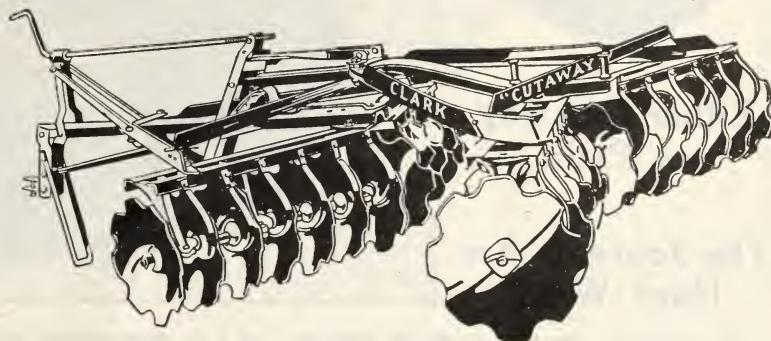
Price on Application

Clark
"CUTAWAY"**Flexible Tractor Disk Harrow**

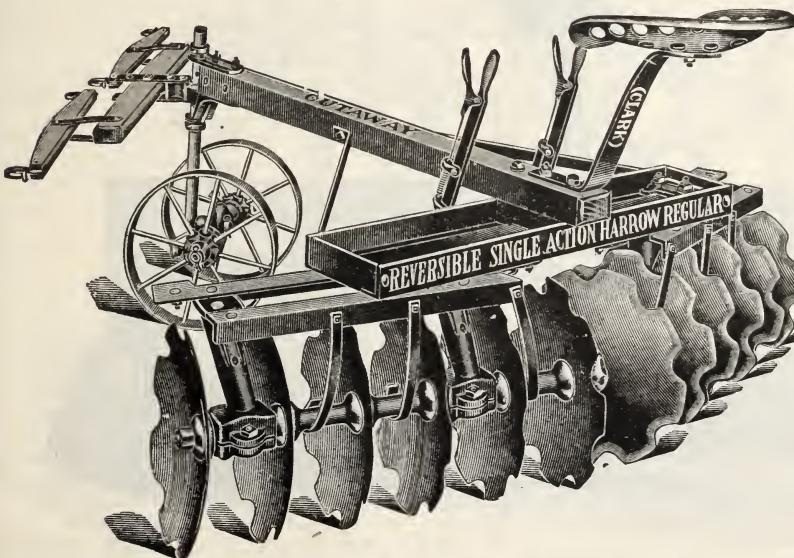
The rugged simplicity of this tractor harrow will appeal to practical farmers. While the frame permits extreme flexibility, at the same time the harrow is very efficient and does a first class disking job. Unusual strength with light weight is obtained by using high grade materials. The harrow is made to work on difficult conditions as well as for average work. The front section may be used alone if desired.

Either cutout or solid disks will be furnished at the same price. Both kinds are of cutlery steel with edges forged sharp. That is why they will outwear two or three sets of ordinary disks. CLARK "CUTAWAY" Disks are guaranteed three years. For easy penetration, thorough work and light draft the CLARK "CUTAWAY" Flexible Double Action Tractor Harrow is unsurpassed. It is made in the sizes listed below.

- 24 16 in. disks, 6 $\frac{1}{2}$ ft.
- 28 16 in. disks, 7 $\frac{1}{2}$ ft.
- 20 18 in. disks, 5 $\frac{1}{2}$ ft.
- 24 18 in. disks, 6 $\frac{1}{2}$ ft.
- 28 18 in. disks, 7 $\frac{1}{2}$ ft.
- 28 20 in. disks, 8 ft.

**Clark's "Cutaway" Single Action Harrow**

REGULAR WITH TONGUE TRUCK

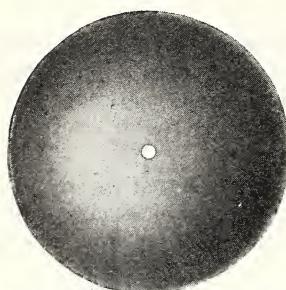


harrow are cutlery steel discs, forged sharp. This feature partly accounts for the remarkably long service always given by "Cutaway" disc implements. Forging compacts the molecules in the steel, making the discs much tougher than those sharpened in any other manner. It makes them retain a sharp edge long after ordinary discs are well worn away.

Price on Application

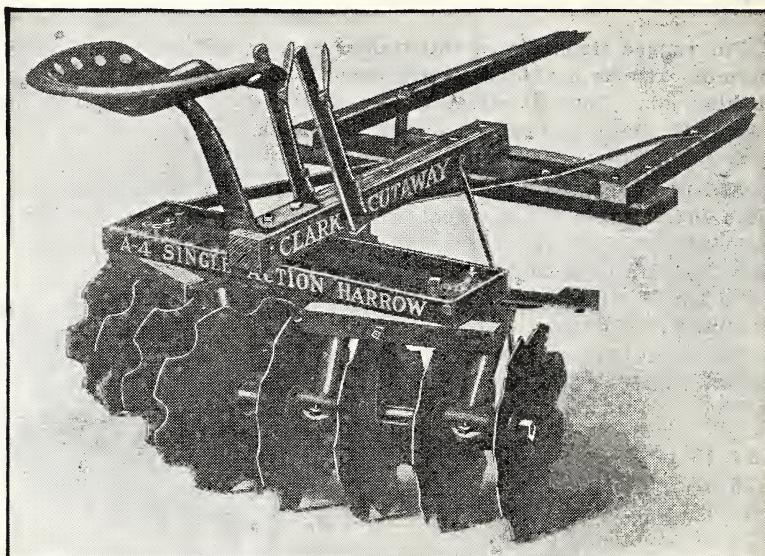
Why has this harrow won the support of practically every farmer who owns one? Because, first of all, it does the work; it is one of the most effective tillers ever put in the field. Second, its durability is almost unlimited. Third, it is convenient to handle and easy on the team. To reverse this harrow you simply disconnect the lever links from the gang frames and swing the gangs around on the king bolts until what were formerly the outer discs become the inner discs, and reconnect the links. In this latter position the discs will throw the soil inwardly. Like those on all other "Cutaway" implements, the discs on this

Clark's "Cutaway" One-Horse Harrow



**Either Cutaway
or Plain**

**The Journals Are
Hard Wood**

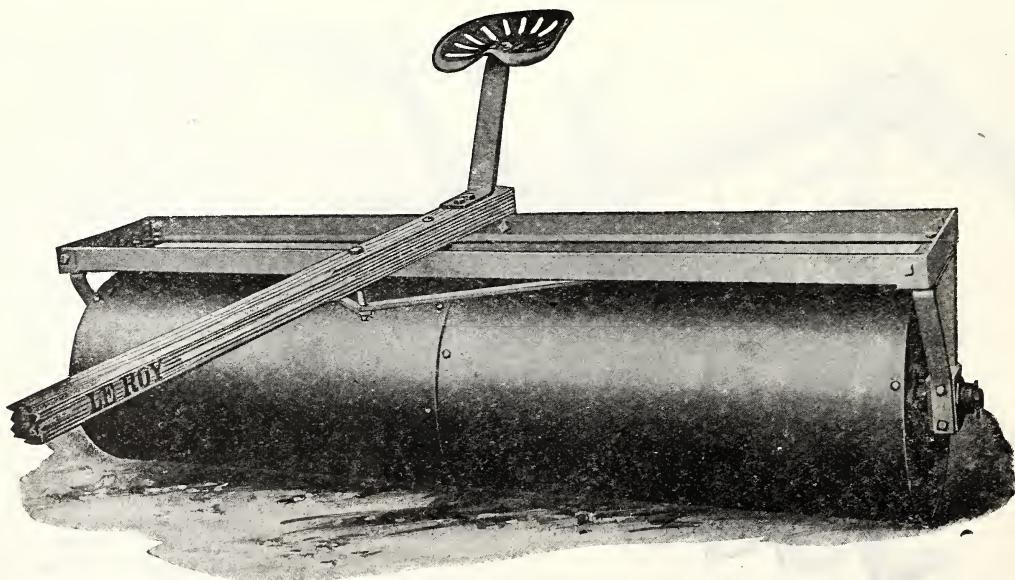


It is made for the express purpose of meeting the needs of the man who has only one horse. By means of the "Cutaway" Harrow intensive tillage is made

as economical and as practical for the man with a small outfit as for the man with large equipment. This machine is equipped with 16-inch Clark forged edge discs.

PRICE ON APPLICATION

Steel Land Rollers

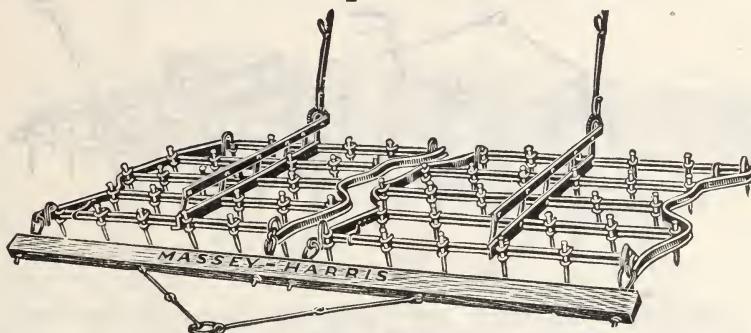


Heavy steel heads are used, making fully closed ends. The rims or drums of these rollers are of the best material, of heavy

gauge, and are firmly riveted to the heads. The hangers are of forged steel and are not easily broken.

Price on Application

Massey-Harris Spike Tooth Harrow

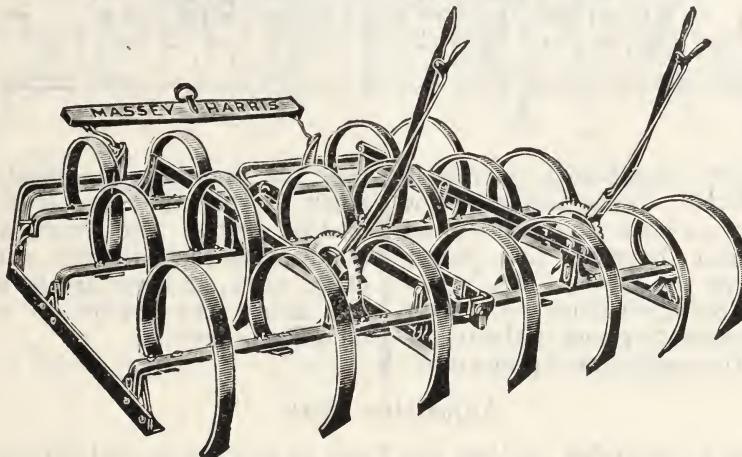


Service of a lasting order is built into this simple implement just the same as it is into the Massey-Harris machines that are far more complex. High carbon steel predominates throughout the construction and all the parts have ample stiffness both to retain their shape under real hard usage and to resist the twisting strains to which they are subjected in field operation.

Stout frame sections. Two end bars made from steel channels, five cross bars made from

steel "U" bars and a wide steel center bar make up the frame sections. The channel bars tie the cross or tooth bars at their ends, hold them in line and prevent them from catching trash. The center bar acts as an additional tie for the cross bars and also furnishes a support for the shifting lever ratchet. At the left rear corner of the sections and at the right front one a stout brace of malleable iron is used. The arrangement of the cross bars is such that although each of them has the same tooth spacing none of the teeth trail.

Massey-Harris Spring Tooth Harrow



In these harrows you will find quality of a high standard. With the exception of the draw bars and a few malleable castings they are built entirely of steel and of a particularly good grade. They are well designed, do excellent work and last long. They are adjustable for hitching high or low, enabling equalizing the pressure on all teeth and insuring the most effective work.

Good clearance for trash. The frame sections which are made of high carbon steel

angles, are bent up well at the front, the cross bars are high from the ground and the teeth are so arranged that no two trail. Good clearance is thus obtained and trash readily works through the harrow without being carried along by any of the parts.

Renewable steel runners. The two sides of each section which bear on the ground, are protected from wear by heavy runners of 55 carbon steel.

SPECIFICATIONS

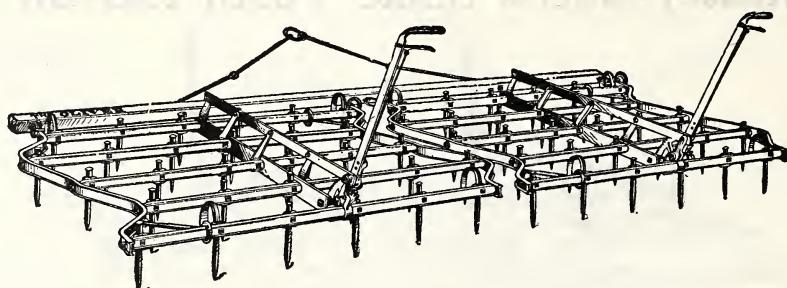
No. of Teeth
15
17

Width
5 ft. 4 in.
6 ft. 0 in.

Sections
2
2

Regular Equipment
One 2 Sec. Draw Bar
One 2 Sec. Draw Bar

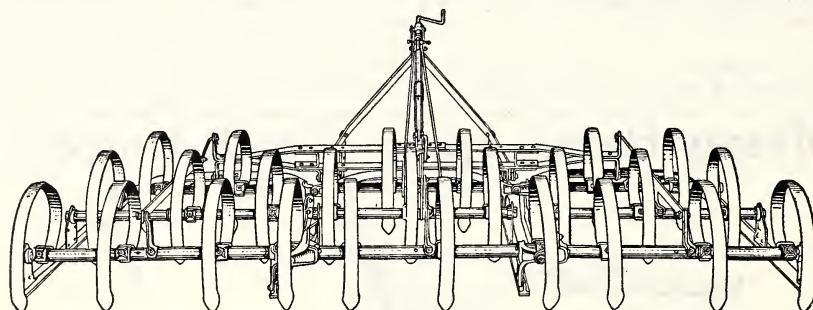
Oliver Spike-Tooth Harrow



The Oliver spike-tooth harrows are equipped with side latch levers that make it easy to control the harrow and provide a

grip for lifting the sections to clear the teeth of trash.

Oliver Tractor Spring-Tooth Harrow



The Oliver TPB spring-tooth harrow is leverless. A handy, quick-acting screw control, such as has been so successful on Oliver tractor disc harrows and plows, raises and lowers the teeth. This screw control is easily operated from the tractor seat without dismounting and without loss of time. With the outfit moving or stand-

ing, the operator can easily adjust the teeth so that they penetrate at just the desired depth. The leverless construction makes this harrow very suitable for orchard work, as there are no levers extending above the frame to catch on low hanging branches.

Adjustable Hitch

The hitch can be adjusted so that the harrow runs level under all conditions. For instance, in very soft ground the hitch

can be lowered so that the harrow will not bury itself.

T-Bar Frame

This harrow is equipped with an inverted T-bar frame, which greatly increases its strength. Fastened to the bottom of the frame are steel runners, which extend

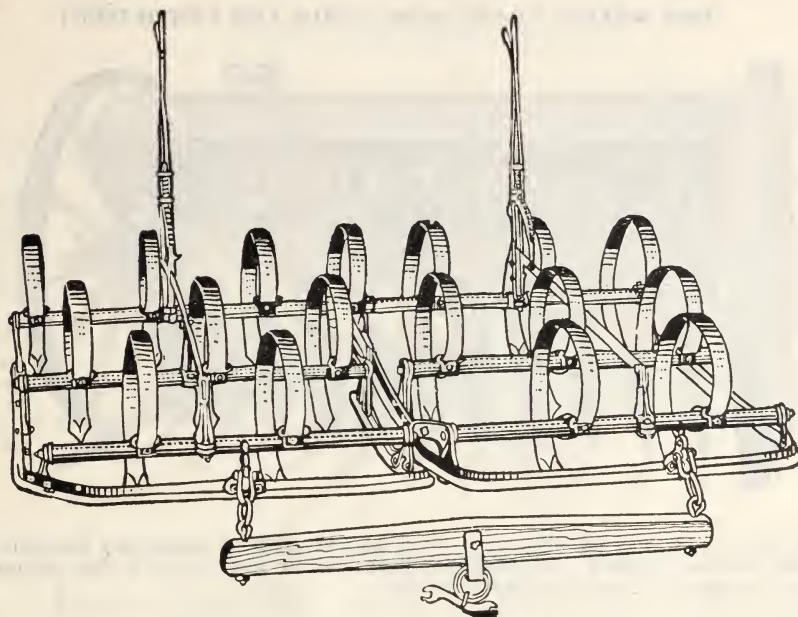
beyond the curve in the frame and protect it from wear. When worn, the runners are easily replaced.

Specifications

Number of sections, 3; number of teeth, 25; weight, 497 pounds.

PRICE ON APPLICATION

The Oliver Lever Harrow



Oliver spring tooth harrows are made in two sections, fifteen or seventeen teeth. They are made with channel bar frames with runners.

The sides of the frame form runners. The inside runners are cut off halfway to allow ample clearance for trash. Reversible steel shoes, one-fourth inch thick, bolted to the bottom of runners save wear on

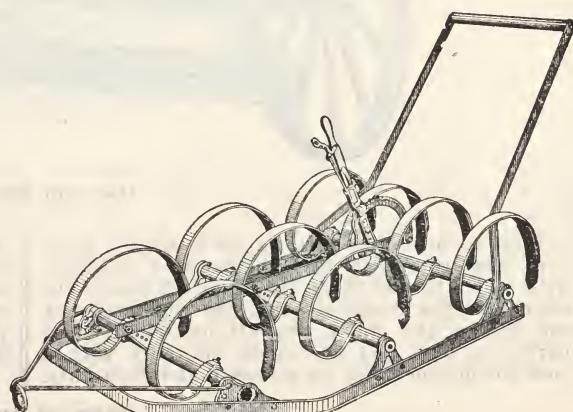
frame. The frames of the channel bar harrows are made of high carbon T stock. Design of tooth clip prevents teeth slipping or becoming loose. The tooth clip gives any amount of adjustment desired, and allows a large part of the tooth to be used. A lever on each section also permits quick, positive adjustment of the spring teeth.

PRICE ON APPLICATION

One-Horse Spring Tooth Harrow

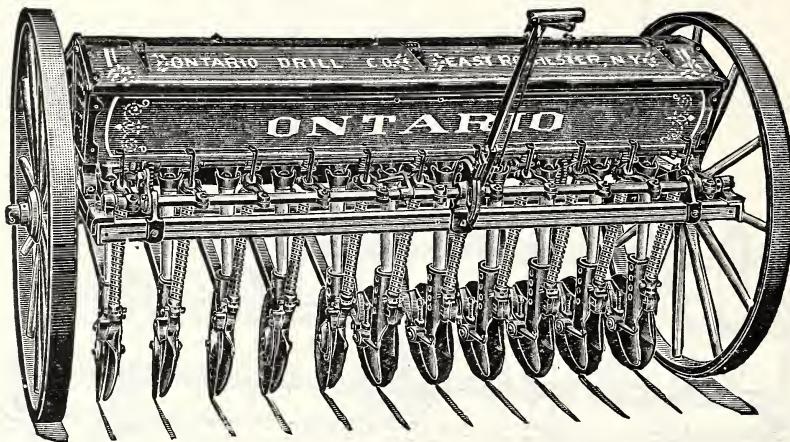
A very popular harrow, used extensively for orchards, gardens and small farms. Made entirely of steel and malleable iron. Is controlled by the handles as easily as a cultivator. Frame is made of angle steel and is sloped at the front to avoid obstructions. Has renewable steel runners.

PRICE ON APPLICATION



Ontario Combined Single Disc Drill

(FOR SOWING GRASS SEED, GRAIN AND FERTILIZER)



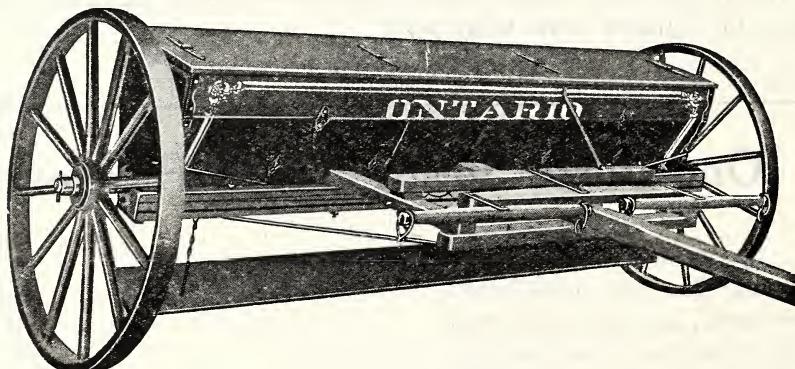
The most popular and best adapted style of drill for the New England States. In simplicity of construction, accuracy of operation and light- ness of draft, it excels any machine in the world of similar construction and recognized merit.

The Ontario Fertilizer and Lime Distributor

Style H

SIMPLE, STRONG, DURABLE

Sows Broadcast



One and Two Horse

Built to meet the demand for a simple, practical and comparatively inexpensive machine with which to distribute lime and fertilizer. The quality of the material used, the workmanship, the design and finish are all first-class. The parts are few, and are made not only with a view to efficiency, but for strength and durability.

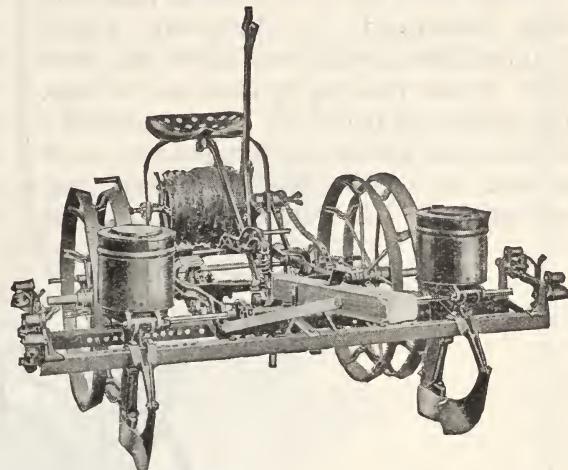
The mechanism is of the simplest form and easily understood. It is an honest, durable and practical machine, with exceptional value for the cost. Has proved a useful, handy machine for sowing dry fertilizers, such as plaster, ashes, lime, bone dust, cotton seed meal, salt, etc.

Price on Application

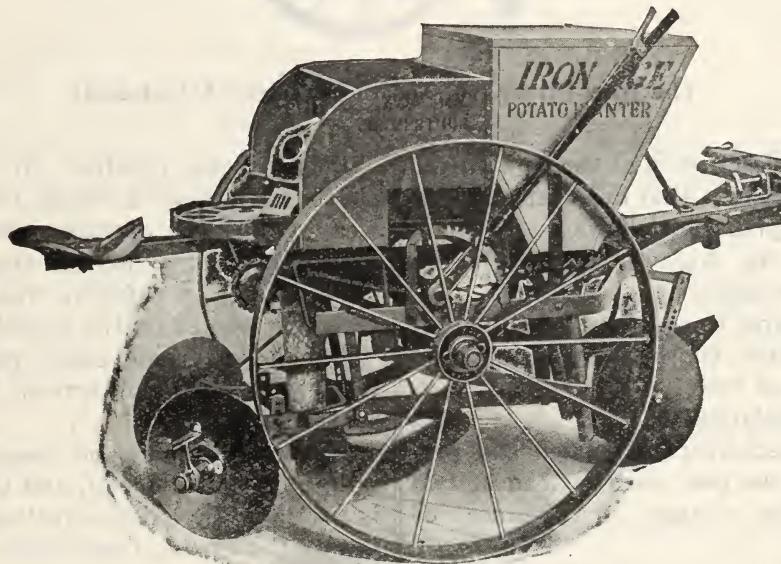
Superior No. 24 Clutchless Corn Planter

BUILT FOR LONG SERVICE

Simplicity, strength and remarkable accuracy are the outstanding features of the Superior Clutchless Corn Planter. Either flat or edge drop plates can be used, and as the plates move steadily at all times almost perfect filling of cells is assured. Row adjustment is from twenty-eight to forty-eight inches, two-inch spacings. No clutch on feed shaft to get out of order. Double adjustable marker.



Iron Age No. 404-R Potato Planter



All potato growers admit that for absolute accuracy in planting nothing equals the IRON AGE Assisted-Feed Planter. In this machine a helper seated on the rear inspects the planting of every piece, correcting all "doubles" and "misses" such as are bound to occur because of the variation in size and shape of the cuttings. The opening plow leaves a small ridge down the middle of the furrow. The blade between discs holds all trash firmly against the ground, helping the disc to cut through easily and to avoid

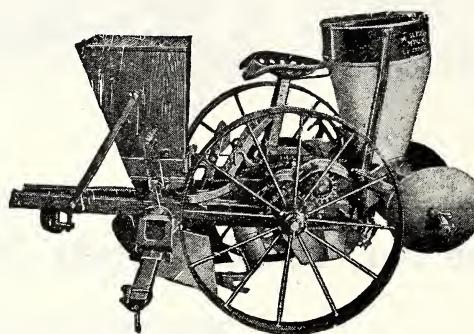
clogging. The fertilizer tubes—four unbreakable rubber spouts—spread fertilizer on each side of ridge as desired, where it is covered and mixed into the soil by the shoe which follows. The planting shoe splits the ridge, mixing fertilizer thoroughly with the soil on each side, makes a groove for the seed, which prevents its rolling, and places it where it cannot come in contact with the fertilizer. It plants exactly in a straight line and at the exact depth desired.

Price on Application

McKenzie New Oliver Potato Planter No. 5

About forty years ago, Mr. L. A. Aspinwall introduced the Automatic Potato Planter. The agricultural world was startled. Potato planting by hand was tedious, inaccurate and uncertain. Mr. Aspinwall's efforts were doubted at first, but were soon greeted with widespread enthusiasm and recognition. His Potato Planter proved

its practicability, was developed and grew better and better. In 1921 the New Oliver No. 5 was invented. This is indeed the most perfect potato planter ever built—it leads everything in the field—and has made potato planting a science—is absolutely accurate in every degree at an immeasurable saving of time and labor.



The New Oliver No. 5 with Fertilizer Attachment.

A detailed description of the **New Oliver No. 5**—the machine that has opened a new era in potato planting, follows:

Made to the highest manufacturing standards throughout.

Plow is nearer to center of machine, insuring uniform depth in planting and straightness of rows.

Perfectly balanced.

Gearing mechanism simplified and perfected; only one gear used instead of two when making change in distance of planting.

Planting distances: 9-10-11-12-13-14-15-16-17-18-20-22-24-26-28-30-32-34.

No wheel to remove in changing gears, just pull the cotter pin.

Magazine feed on outside of frame, causing both canvas hoppers to feed alike.

No eccentric in magazine to crush seed, or to obstruct the feed.

Picker head revolves on independent shaft provided with clutch, not subject to wear, giving the operator accessibility to remove pickers without turning gearing.

Feed gates operated by crank instead of eccentric located on the outside.

Outside of frame easily removed, provided with adjusting screws for accurate control of feed.

Disc covers may be removed without taking off drive wheels, and disc pressure is regulated by quick adjusting springs on top of the frame, free from contact with dirt.

Sheet metal hopper affords greater durability and is shaped to give the operator utmost ease.

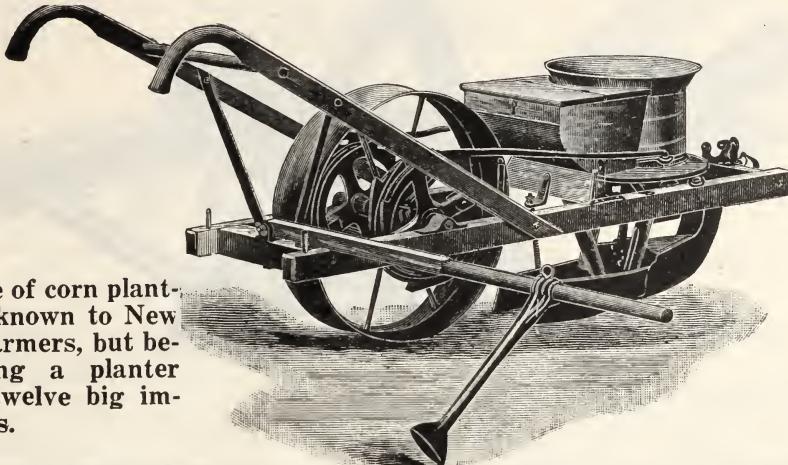
Canvas sack hoppers are attached to metal extension by single hoop bolt, clamping sack hopper securely.

Complete with fertilizer attachment.

The Most Perfect Potato Planter Ever Built.

Corn, Bean and Pea Planter With Fertilizer Distributor

Plants Corn, Beans, Peas, Beets and Other Seeds of Like Size



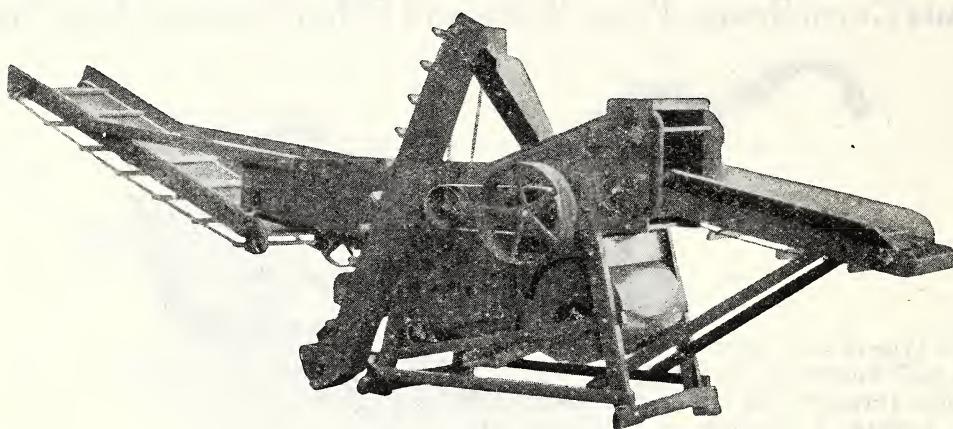
This type of corn planter is well known to New England farmers, but before buying a planter read the twelve big improvements.

1. Movable and Stationary Fertilizer Plates are made of a new composition metal which resists fertilizer action and positively cannot rust. Common iron plates that "freeze in" cause excessive breakage and expense.
2. Fertilizer Hopper and Spouts are made of a metal that is specially treated before it is galvanized to resist rust and fertilizer.
3. Supporting Stand holds up planter when not in use and when filling hoppers.
4. Metal Partition in Seed Hopper makes a stronger hopper. Wooden partitions often warp and split.
5. Seed Brush is securely held in place so it cannot slip up. This is important.
6. Brackets on rear end of Steel Runner eliminates breakage of several parts

which were formerly broken frequently.

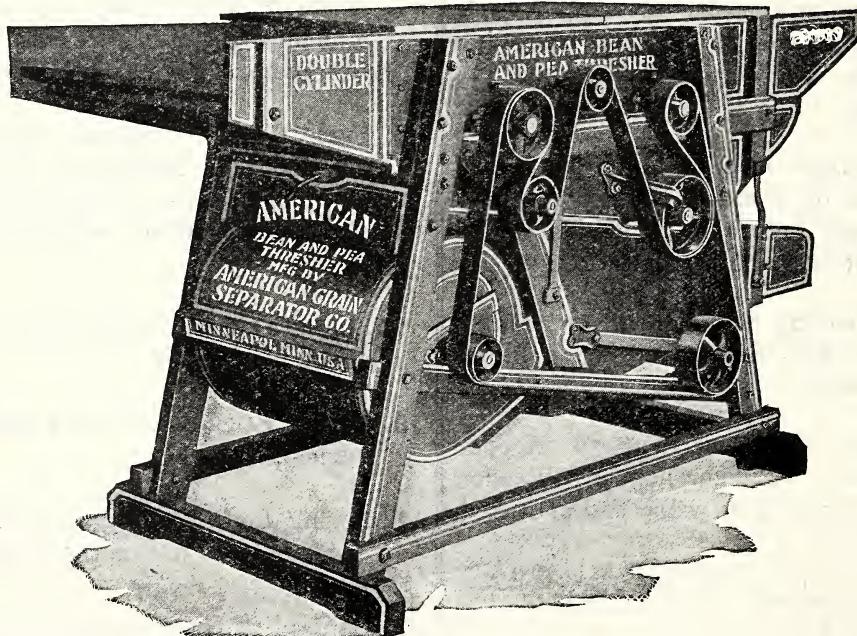
7. Angle Steel Support for Coverer Standard securely fastens to side sills instead of to seed hopper.
8. Cam Wheels fastened with two grooved pins instead of one taper pin. This saves a trip to the machine shop when replacing cam wheels.
9. Special Concave Wheel holds better and wears longer.
10. Marker Stick Support is a great convenience.
11. Spring Lock Washer on every bolt lengthens the life of the planter.
12. General Strengthening and Reinforcing of parts where required as shown by past experience with other planters of this type.

Nos. 20 and 14 American Double Cylinder Bean and Pea Thrasher



No. 20

This machine will thresh all varieties of beans (or peas) directly from the rankest growing vines without splitting the seed. It takes all the seed from the vines and pods in a clean, marketable condition, and shreds the vines, making them valuable for fodder.



No. 14

STRONG, RUGGED, EFFICIENT—EVERY BUYER SATISFIED

Prices on Application.

"New Model Centennial"

No. 8.—An extra implement at small additional expense.

The regular 5-tooth Horse Hoe, Cultivator and Coverer combined (No. 1), or an 8-tooth pulverizer on same frame.

The long frame of the "New Model Centennial" allows us to add the extra teeth without danger of clogging.

No. 8

has eight 1-in. points,
long wings and lever.

No. 1

has five 3-in. points,
long wings and lever.
Back of Improved Point, 1
inch wide.

The "New Model Centennial" Horse Hoe, Cultivator and Coverer combined has long been recognized as an implement of unusual merit. The simplicity and fewness of parts required for changing it over to suit the various kinds of work to which it is adapted, and its unique and very

"New Model Centennial"

NO. 8

As a Pulverizing Cultivator
with very Fine Teeth

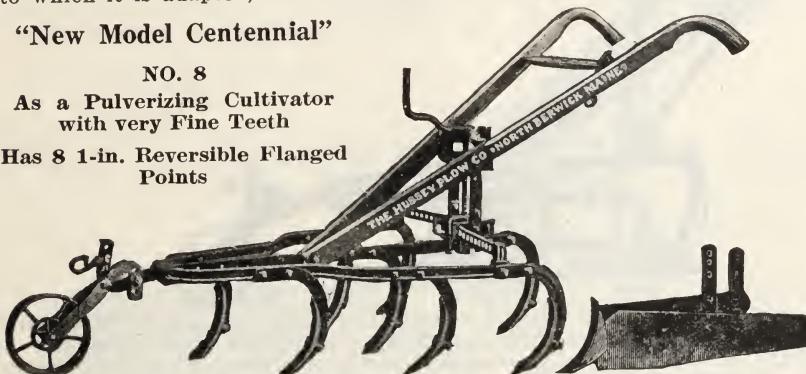
Has 8 1-in. Reversible Flanged
Points

No. 1. New Model Cultivator

efficient expansion lever, are among the reasons for its popularity.

An important improvement has recently been made in the one-inch reversible points for this cultivator. The illustration at the left shows the improved point with the strengthening flanges. It will be readily seen that the flanged point is not only much stronger than the old style, but the flanges prevent the point from swinging around on the standard in rough and rocky land.

Equipped with eight of these narrow flanged points, the No. 8 is one of the very best pulverizing cultivators on the market.



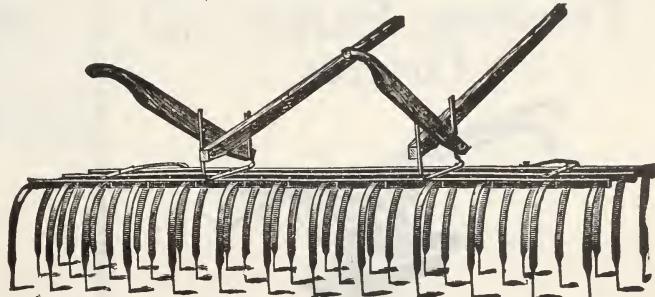
No. 8 as a Pulverizing Cultivator with Furrowing Wings Detached

PRICE ON APPLICATION

The K.&W. Weeder

The attention of farmers is called to the great saving effected in time and labor by using the "K. & W." Weeder.

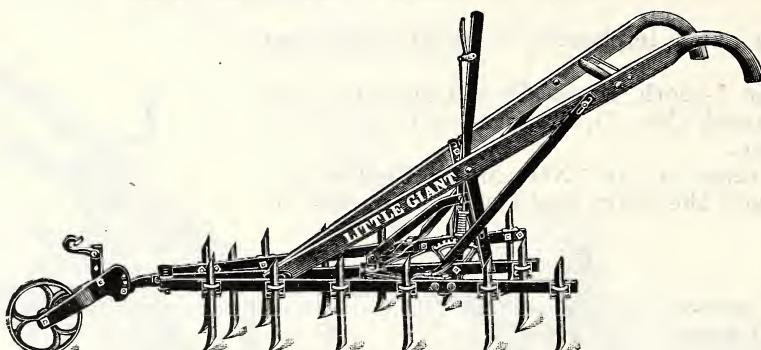
One of the best machines for level cultivation; will not injure the roots of the growing crops, but kills out the weeds, and leaves a fine mulch on the surface of the ground.



PRICE ON APPLICATION

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

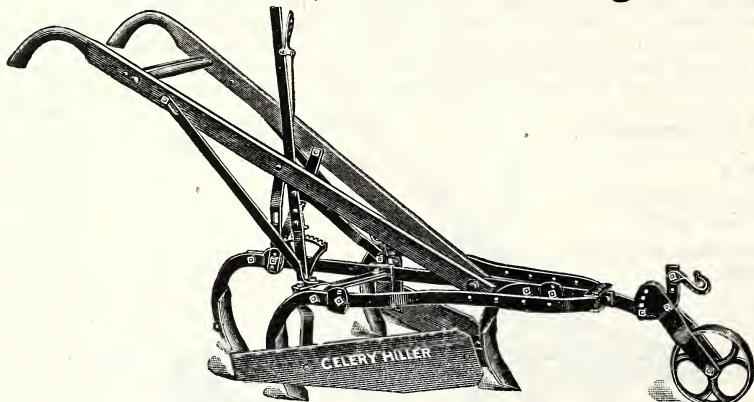
Diamond Tooth Cultivator



As plainly shown in cut, the teeth are diamond shaped, with a small cultivator tooth forged on one end—steel, of course. For very close work, every other tooth can be quickly removed. Cultivating width, when equipped with lever expander, 34 inches.

Price on Application

Five-Tooth Cultivator, With Hilling Attachment

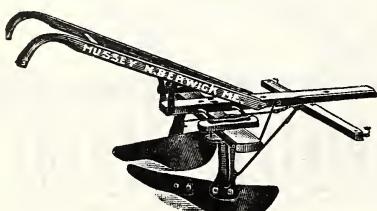


The hilling attachment is applied by simply removing four standards and placing the standard of the hillier on the middle bar and attaching the short standards of the blades to the side

bars. This attachment is used in cases where higher ridging is desired than what can be accomplished with the regular horse hoe blades.

Price on Application

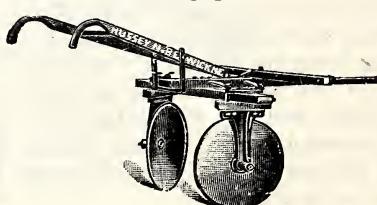
Improved Potato Hoe, Furrower, Marker and Coverer



The Improved Potato Hoe is, as its name indicates, especially adapted for hilling potatoes, banking celery, and also as a coverer. It is much used as a "marker" for different crops, making the rows parallel and equally distant.

Price on Application

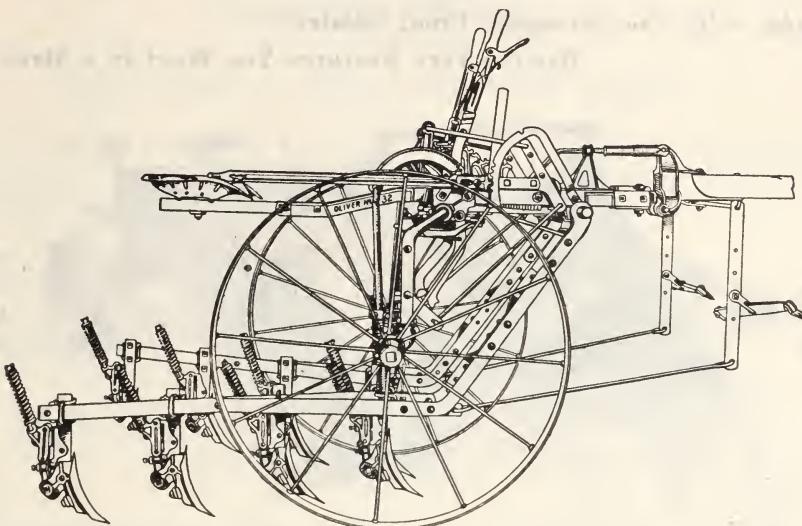
"K & W" Improved 20-Inch Disc Potato Hoe



Considered by many farmers the best hoe made for hilling and covering. A distinct departure from the styles commonly in use, the large discs doing smooth and perfect work.

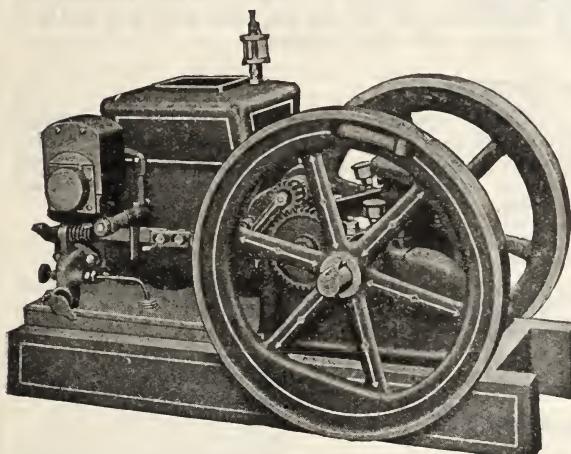
Price on Application

The Oliver No. 35 Cultivator



This NEW Oliver No. 35 Cultivator has been || received the unqualified approval of the practical thoroughly tested out in different parts of the || farmer. Disc attachment and shields furnished. country where conditions are difficult and has ||

Gasoline or Kerosene Engines



MONARCH "HIT AND MISS" ENGINES

Monarch "Hit and Miss" engines burn gasoline only. The "Hit and Miss" governor is recognized by engine authorities as the best for small engines—particularly the 1 $\frac{3}{4}$ horse power. This governor automatically regulates the fuel supply so that only enough gasoline can be drawn into cylinder to keep the engine up to normal speed.

Power and long life are largely a matter of bore and stroke. Read carefully the specifications given below. You will find Monarch engines well in the lead with surplus power.

SPECIFICATIONS OF MONARCH ENGINES

Horse Power	Type of Governor	Fuel Consumed	Speed	Floor Space	Cylinder	Diameter of Fly-wheels	Size of Pulley	Weight
1 $\frac{3}{4}$	Hit and Miss	Gasoline	500	20" x 40"	3 $\frac{1}{2}$ " x 5"	16"	4" x 4"	225 lbs.
3	Throttle	Kerosene and gasoline	450	27 x 38	4 $\frac{1}{2}$ x 6	21	8 x 6	475 "
5	Throttle	Kerosene and gasoline	430	30 x 45	4 $\frac{3}{4}$ x 8	26	12 x 6	700 "
7	Throttle	Kerosene and gasoline	370	38 x 58	5 $\frac{1}{2}$ x 10	36	14 x 8	1215 "
12	Throttle	Kerosene and gasoline	330	46 x 71	6 $\frac{3}{4}$ x 12	42	22 x 8	2100 "

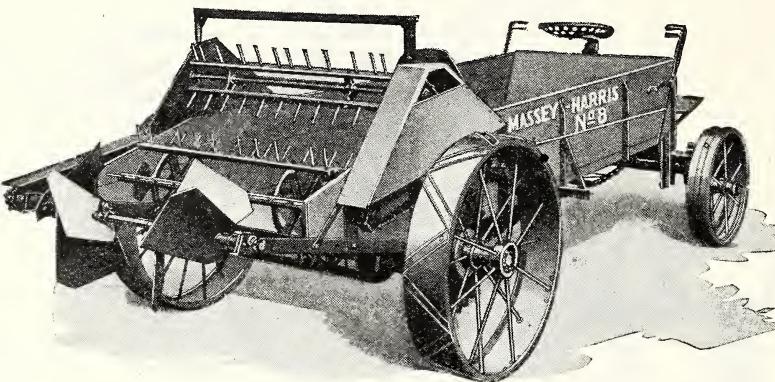
Price on Application

Massey-Harris No. 8 Manure Spreader

"The Spreader with the Strongest Front Bolster"

Has the Very Features You Want in a Manure Spreader

Low Down,
Tight Bottom,
Narrow Tread,
Wide Spread.



A Two-Horse
Machine That
Is Built Strong
To Last Long.

From whatever point of view you are of the mind to consider the Massey-Harris No. 7 Manure Spreader, you will find it mighty good equipment that will serve you to splendid advantage. It is of the most improved and convenient-to-use

types yet developed; it has been tried and proven and it is offered to you with the warranty that it is well made of good materials and will do good work for you.

IT IS EASY TO LOAD

Only 43 inches is the loading height at the rear wheels and the box is so narrow in width (being only 40½ inches) that you can load all from one side without the least difficulty. Yet there is ample capacity for from 60 to 65 bushels

without using anything to increase the size of the box. The seat has a hinged mounting, which permits of tipping it forward when loading, so that it will be out of the way and will not get covered with the manure.

DRAFT IS LIGHT

Everything about the machine is conducive to light draft. The wheels are high and broad-faced, with plenty of lugs at the rear to give positive traction, and the rear ones track with those at the front, the working parts are few in

number and are always in perfect alignment, and friction is minimized at every point. Moreover, the team hitches close to the load, making it an easy matter to handle the machine at all times.

SUITABLE FOR LEVEL OR HILLY PLACES

Being of light draft, having the high, broad-faced wheels that are so arranged that the front ones track with those at the rear, and being built low, with great stability, this machine is equally suitable for level and rough country.

With it you can work up and down the hills or along the side of them according as you may prefer. The wheels will not slip to the side and when necessary they can be equipped with an effective, quick-acting, band brake.

SPECIFICATIONS

Length of Box (inside)—113 in.

Width of Box at Front (inside)—39½ in.

Width of Box, at Beaters (inside)—41¼ in.

Depth of Box (inside)—16½ in.

Height of Load—18 in. to 32 in.

Width Over All—74½ in.

Width of Tread (both front and rear)—68½ in.

Wheel Base—101 in.

Front Axle—Steel, Auto-type, 1½ in. diameter.

Rear Axle—Steel, 1¾ in. diameter.

Rear Wheels—Steel, 36 in. diameter, 7 in. tire.

Front Wheels—Steel, 26 in. diameter, 4½ in. tire.

Loading Height at Rear Wheels—36 in.

Beaters—Two; Steel U-bar construction.

Box—Tight Bottom, Wagon Braced Sides.

Apron—Endless with Angle Steel Slats.

Hitch—2 Horse with Neckyoke—(Steel).

Attachments—Wheel Brakes for Hilly Districts.

Loads per acre—6, 8, 12, 16, or 20.

Width of Spread—7 ft. covering both wheel tracks.

Price on Application.

Concrete Mixer

You Need a Mixer on Your Farm

Every farm owner has ideas of improving his farm and increasing its value, not only by increased fertility of the soil, but also by the addition of per-

manent farm structures. Concrete forms the cheapest and best foundation for all improvements.

Quantities Required

A cubic yard of concrete of 1-2-4 mixture will require:

1 1-2 barrels (6 sacks) of Portland cement.

2-5 cubic yard of sand.

4-5 cubic yard of gravel or crushed rock.

General Specifications

Drum—Largest diameter, 22 in.; depth, 21 in.; opening, 17 in.

Shoveling Height—3 ft.

Pulley Size—16 x 3 in.

Pulley Speed—150 R. P. M. maximum.

Drum Speed—30 R. P. M. maximum.

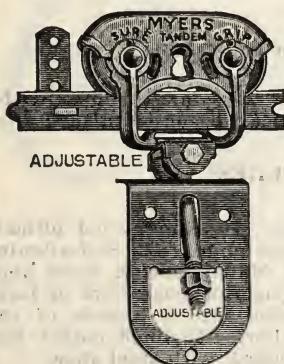
Shipped knocked down; weight, 180 pounds.

Capacity—Wheelbarrow load per batch. One batch per minute.



PRICE ON APPLICATION

Myers Sure Grip Adjustable Tandem Door Hangers



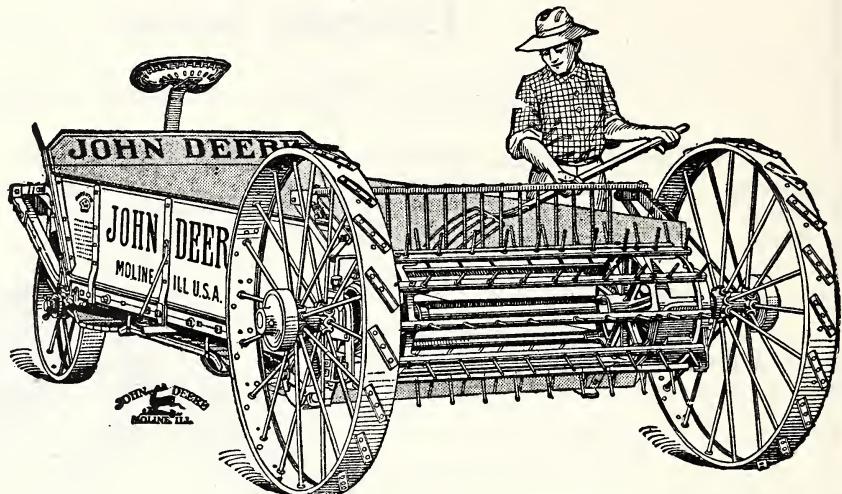
This hanger is adjustable in all parts. The perpendicular and lateral adjustments are made with an ordinary wrench and at the will of the user. It has hard steel roller bearings and will fit any thickness of door. The track is heavy special high carbon stiff steel, $3/16 \times 1\frac{1}{4}$ inches, supported by rigid brackets with a square shoulder mortised through the track.

Hangers, \$2.00 per set

Track, 10c per foot

John Deere Spreader

The John Deere Spreader—the spreader with the beater on the axle—has only one-half as many parts as the simplest spreader heretofore manufactured. All its working parts are mounted on the rear axle. It has no chains, no clutches and no adjustments. Being low down, it is easy to load.



The Ideal Mower for the Fordson Tractor



Available in Three Sizes: 5-foot, 6-foot and 7-foot

Offsets from the tractor sufficiently to cut full swath without tractor traveling in standing crop. Furnishes a strictly one-man proposition. Rais-

ing and lowering of bar for turning or for clearing obstructions can be accomplished from tractor platform.

THERE ARE MANY OTHER SPLENDID FEATURES

Here Are Seventeen of Them:

1. Wide truck, 52 $\frac{1}{8}$ in. tread.
2. High, broad-faced wheels, 33 in. x 4 $\frac{1}{4}$ in.
3. Strong, one-piece main frame accurately machined.
4. Four pawls in each wheel.
5. Roller bearings in cages on main axle.
6. Self-aligning crank shaft bearing.
7. Strong, perfectly meshed gears.
8. Adequate oiling facilities.
9. Wide range of adjustments.
10. Long wood pitman.
11. Steel forged pitman ends.
12. Self-aligning pitman bearings.
13. Malleable iron, brass lined pitman box.
14. Adjustable push bars of large diameter.
15. Machine milled guards of improved design.
16. Perfectly lined cutter bar.
17. Vibrating swath board, with steel shoe.

Write for Quotations

Massey-Harris Two-Horse Mower

A BIG, POWERFUL CUTTING MACHINE OF LIGHT DRAFT
Built only in the plain lift style in three sizes, 5 ft., 6 ft. and 7 ft.

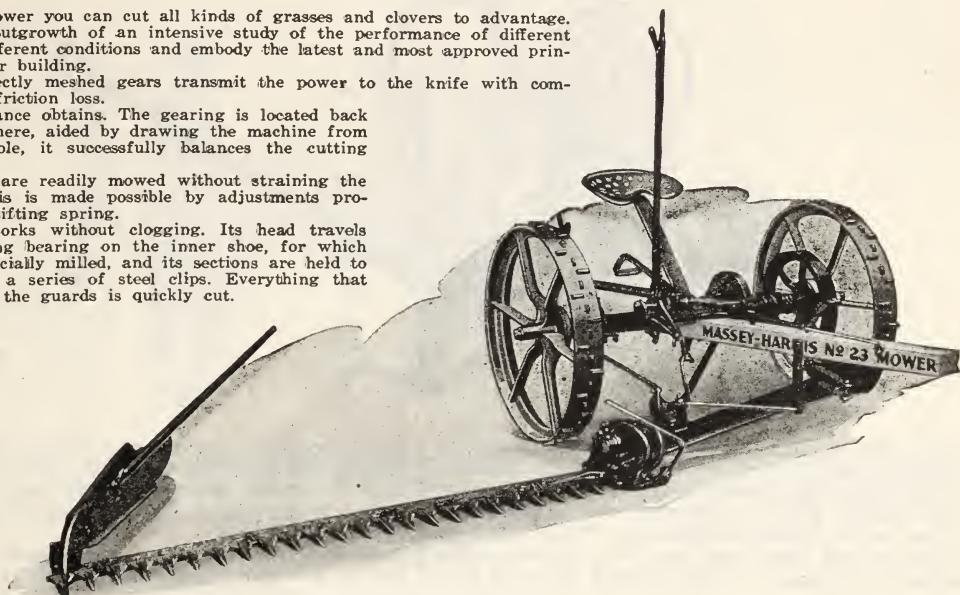
With this mower you can cut all kinds of grasses and clovers to advantage. They are the outgrowth of an intensive study of the performance of different types under different conditions and embody the latest and most approved principles in mower building.

Strong, perfectly meshed gears transmit the power to the knife with comparatively no friction loss.

Splendid balance obtains. The gearing is located back of the axle, where, aided by drawing the machine from beneath the pole, it successfully balances the cutting apparatus.

Rough fields are readily mowed without straining the cutter bar. This is made possible by adjustments provided for the lifting spring.

The knife works without clogging. Its head travels in a close-fitting bearing on the inner shoe, for which the head is specially milled, and its sections are held to their work by a series of steel clips. Everything that comes between the guards is quickly cut.



Prices on Application

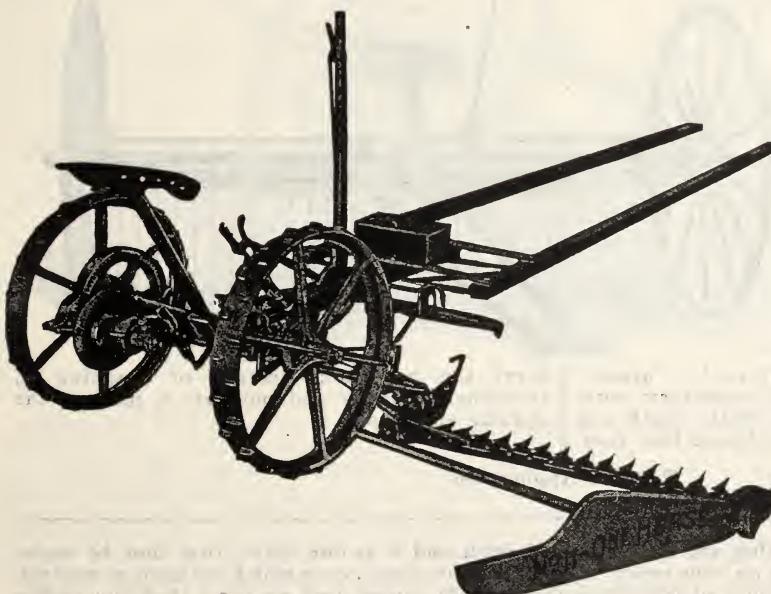
Massey-Harris One-Horse Mower

Built in the vertical lift style in one size, 4 ft.

Width of Tread, 39 in.

Height of Wheels, 31 in.

Face of Wheels, 4 in.



Prices on Application

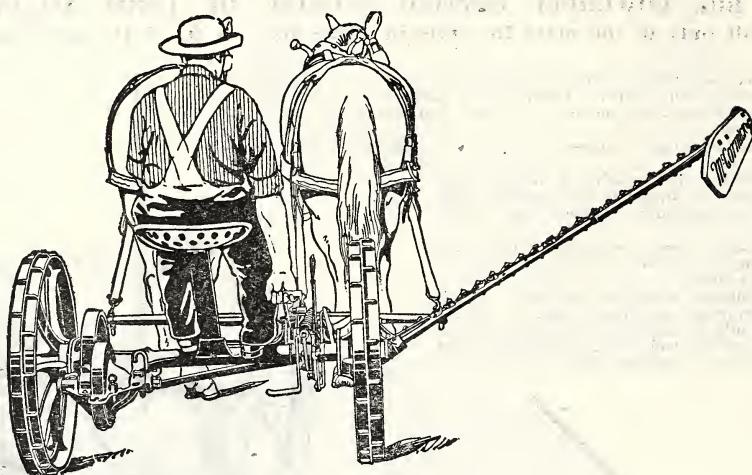
This mower is especially designed for a strictly one-horse machine and well supplies the need of those who require one of that kind. It has ample weight and traction to cut all kinds of hay crops, and yet is of such construction that one horse handles it easily. Light draft is one of its salient features, and in combination with power and durability, makes it good equipment.

The main frame is in one piece, accurately bored to hold the gears and shafting in positive alignment.

Roller bearings are used for both the main axle and the cross shaft, where they reduce the friction to a minimum.

The cutter bar is of cold rolled steel fitted with malleable guards and shoes, all of which are aligned to insure knife working properly.

McCormick-Deering Mowers M



The McCormick-Deering Mowers are easy to pull and have a minimum side draft because of the ball and roller bearings used in their construction and the features which allow the cutter bar to follow the ground. When you buy a mower you want one that will cut the grass without clogging, without wasting grass or put-

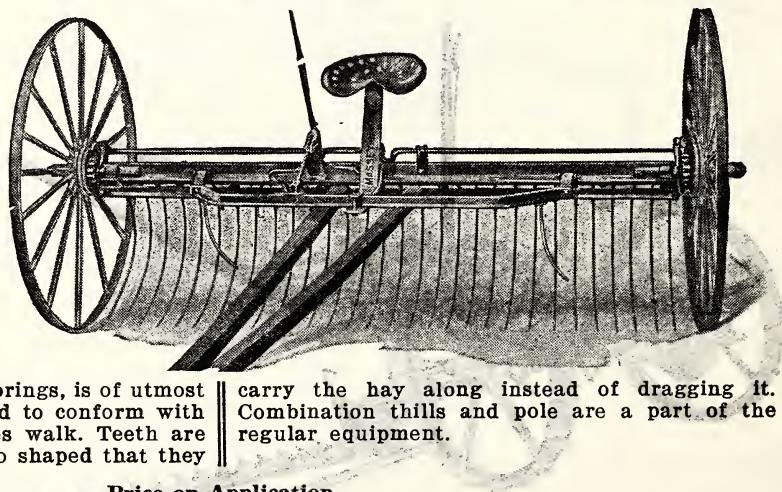
ting excessive strain upon the horses. The McCormick-Deering can be depended upon to do this work day after day and year after year, even though the conditions may not always be favorable.

Made in the following sizes: One-horse vertical lift, 4 ft.; two-horse, 5, 6 and 7 ft., plain lift.

Price on Application

Massey-Harris Self-Dump Steel Hay Rake No. 10

BUILT STRONG AND LASTS LONG



Strength, efficiency and convenience of operation are pronounced features of this rake. It is built mostly of steel, is adapted to heavy and light hay, and can be dumped either by hand or by an automatic trip controlled by the foot. Frame and rake head are steel angles. Wheels are steel, of good height, have removable hubs, of which the ratchets are a part, and will interchange. Double wear is obtained from each ratchet.

Dumping mechanism has no springs, is of utmost simplicity and can be adjusted to conform with the speed at which the horses walk. Teeth are coiled at upper end and are so shaped that they

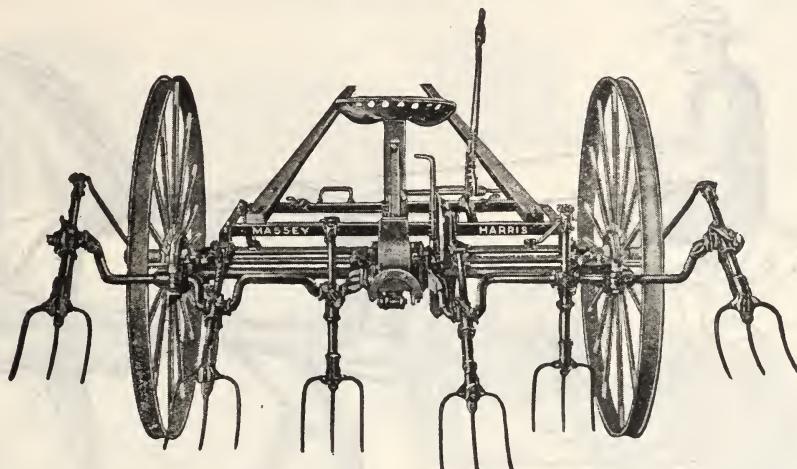
carry the hay along instead of dragging it. Combination thills and pole are a part of the regular equipment.

Price on Application

The prices listed in this catalog are made in good faith and it is our desire that they be maintained as firm figures in making up your order. There are rare cases, over which we have no control, by reason of a decrease or advance of cost from the manufacturers, and we trust that you understand the meaning of the phrase "Prices are subject to change without notice."

Massey-Harris Steel Hay Tedder

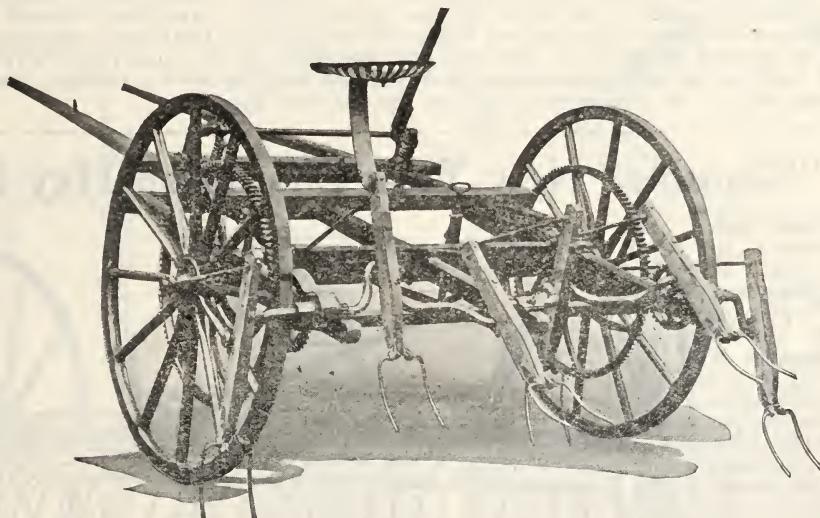
Six Fork Size Equipped with Combination Thills and Pole



Good hay under the most adverse conditions is possible when the services of this implement are employed. It kicks up the swath into a loose, fluffy mass through which the air circulates freely, with the result the curing process is hastened and hay of a high quality is obtained. And, besides, it's built in such a way that it will give many years of satisfactory service.

Price on Application

The Bullard Hay Tedder

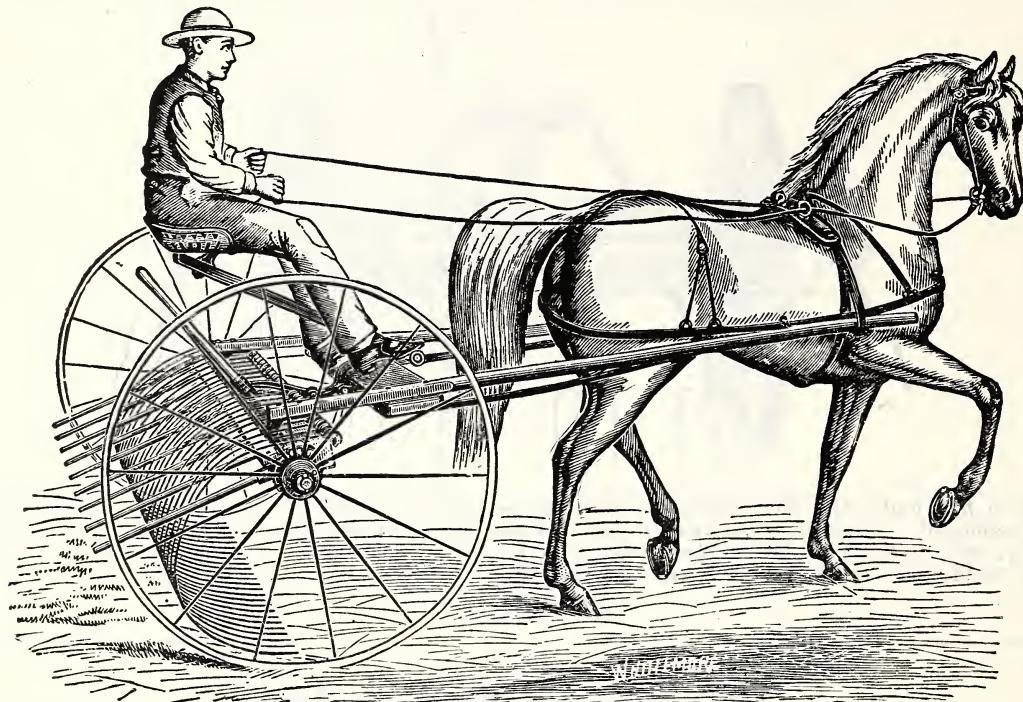


Takes the hay from the bottom, shakes it in the air and leaves it lightly on the ground for the sun and air to complete the work of hay making. Does not shake to pieces. Is elastic but tough. The crank shaft split in the middle makes it easy for the horse to turn. Two tensions springs on the tilting frame, together with the new Mudgett fork springs, prevent breakage of wood arm. The forks on either side are driven independently by the wheel nearest them, so that this tedder can be turned while it works, without straining the tedder or horse, and do good work all the while. If you want to get a tedder that will do its work in the right way, with the least fuss and bother and that gives you the most lasting satisfaction, buy a Bullard.

Price on Application

The Original Yankee Rake

Some of the Leading Points of Superior Excellence Found in the Yankee Horse Rake



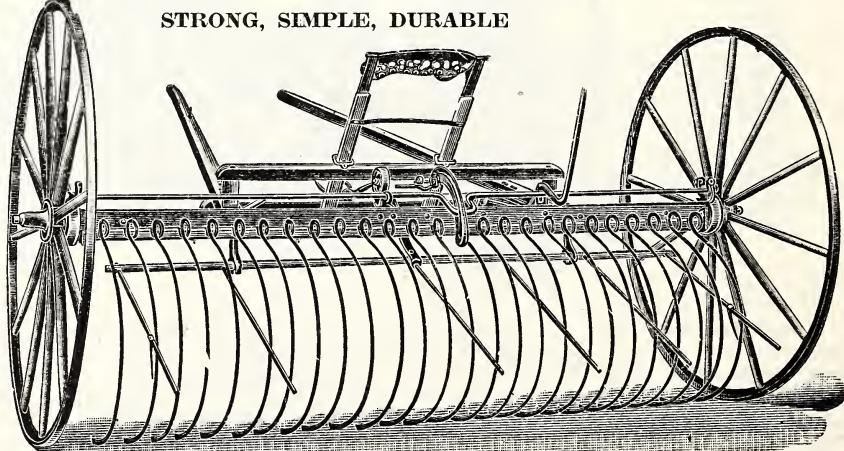
Simplicity in construction and excellent quality of materials. Adaptability to rake anywhere, whether the fields are rough or smooth or the hay green or dry. Rake head adjusted so as to balance the weight of the teeth. This device completely prevents the teeth from dragging heavily and digging into the ground or filling the hay with dirt and dust. Teeth run level with ground at their points. Each tooth is perfectly independent in action and supplied with a yielding spring that will allow it to pass safely over any obstruction that the axle can pass over.

The "Genuine" New York Champion Hay Rake

A "Genuine New York Champion" means to many thousands of farmers the standard of all rakes—one that is always in perfect condition whenever it is wanted. It cleans the ground thoroughly without taking up the dirt, and works with ease and convenience, in heavy or light crops, on level fields or hill-sides.

Dumps with one piece rod from both wheels at once—this makes even draft. Levers, hand and foot, give the driver control at all times.

STRONG, SIMPLE, DURABLE

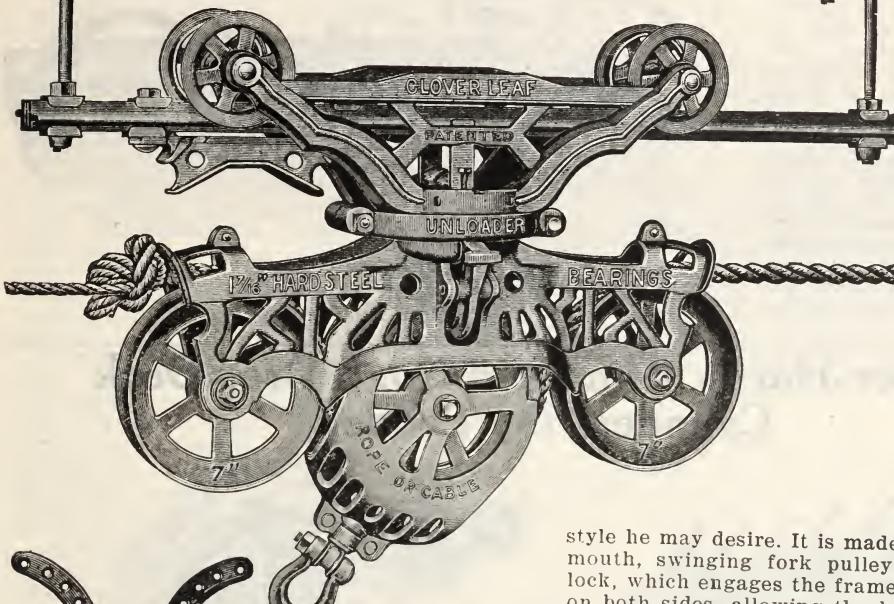


Price on Application

Myers O. K. Steed Track Carrier, With Steel Bearings

SWIVEL AND REVERSIBLE

FOR DOUBLE STEEL TRACK, OR 4 x 4 WOOD TRACK
1 7-16 Inch Steel Bearings



Rafter Bracket

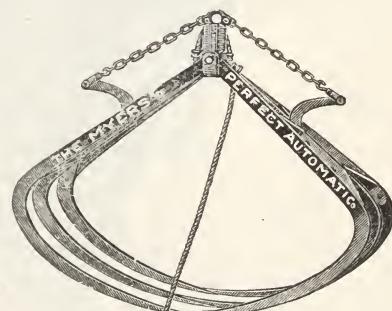


DOUBLE HARPOON FORK

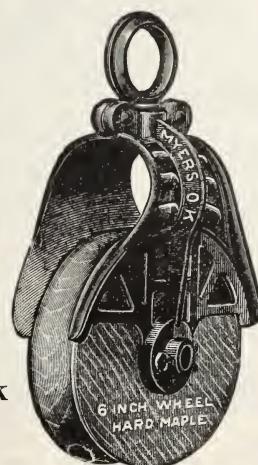
Made from wagon spring steel, which will not bend or spring out of shape.



Steel Rafter Grapples



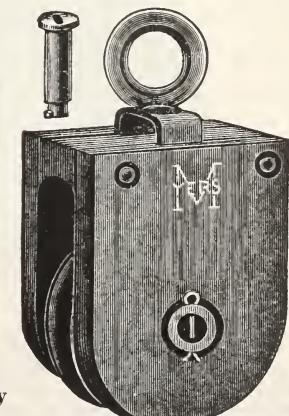
Grapple Fork



Knot Passing Pulley



Steel Frame Pulley



Reed Pulley, with Hook or Eye

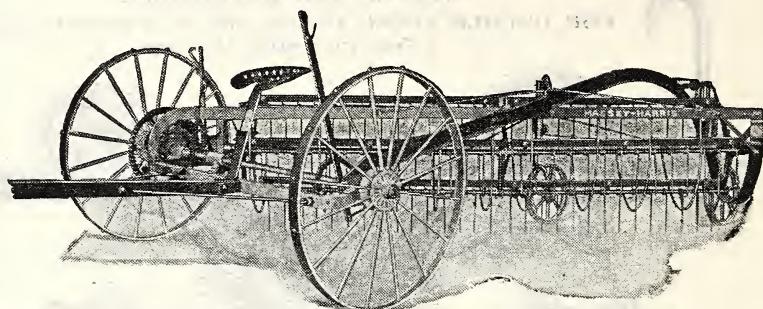
WRITE FOR QUOTATIONS

This carrier is made of the best annealed malleable iron, thoroughly braced, which insures strength sufficient to withstand the most severe usage. The rope sheaves are 7 inches in diameter with 1 7-16 in. turned steel bearings. This style of bearing will give more service and is easier to operate than any other style of sheave. The fact that you can use rope or cable for draft is a special feature used only on the Myers and enables the farmer to use either

style he may desire. It is made with a large open mouth, swinging fork pulley and double force lock, which engages the frame of the fork pulley on both sides, allowing the load to swing clear, avoiding the strain.

Massey-Harris Combined Side Rake and Tedder

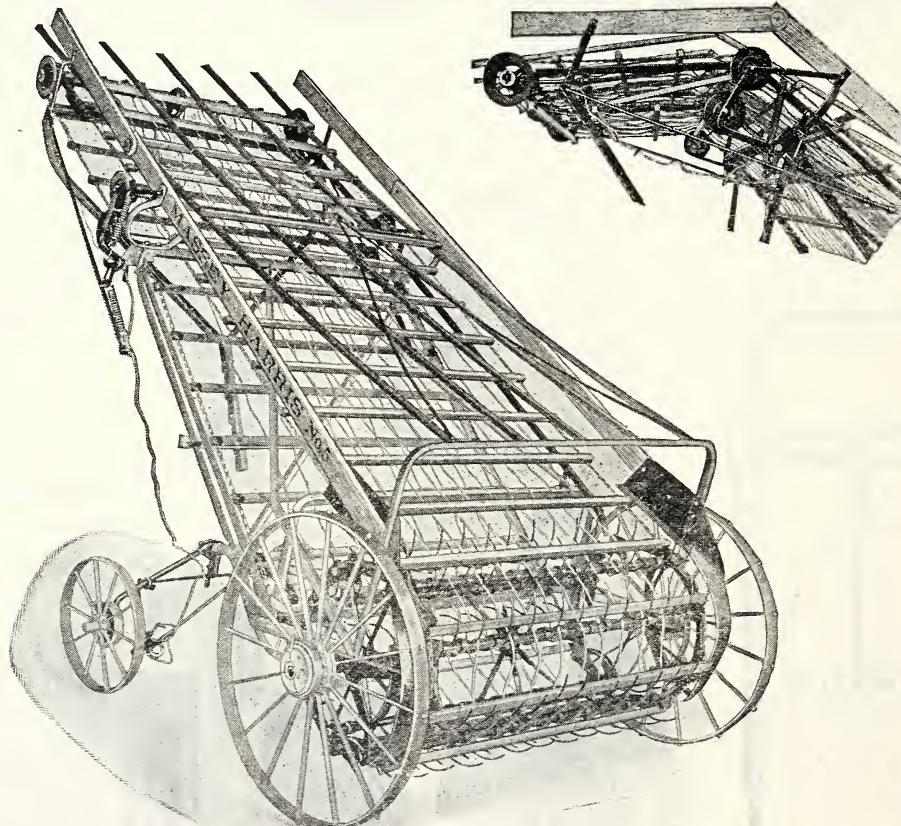
This implement offers you all of the advantages of the most modern side delivery rake and then goes on further. It gives you, in addition, an excellent hay tedder, into which it is quickly converted by simply moving a lever, which causes the motion of the raking cylinder to be reversed at increased speed. Combining two machines in one, it saves you the cost of one, the time of changing from one to the other when separate machines are used, and yet requires no more space for storing than a side rake of the ordinary type.



9½ Foot Cylinder for Hay

Price on Application

Massey-Harris Combined No. 5 Drop Deck Cylinder Hay Loader



THE WINDROW LOADER SUPREME

It is light in weight and elevates the hay overroller bearings. Two horses handle it easily. Loading from the windrow is the purpose for which this loader is designed, and it has every feature that successful windrow loading requires. The weight is light, the capacity is large, it works rapidly and draws easily. It supplies in every respect the demand for an efficient windrow loader and will render you, in the saving of time and labor, a service of inestimable value.

Descriptive Circular and Price on Application

Massey-Harris No. 5 Grain Binder

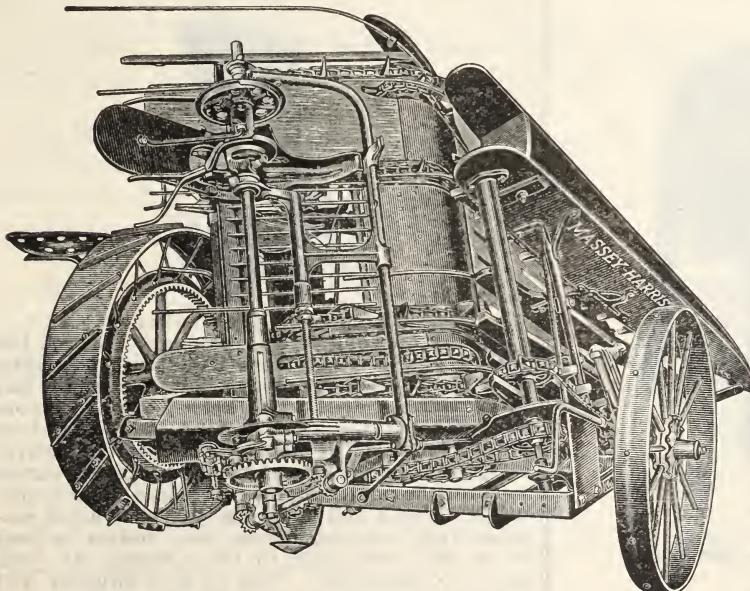
You can rely upon this binder, absolutely, to withstand the hardest kind of work incident to the harvesting of a grain crop. It is built for use with either horses or tractors and is made to give you satisfaction in every respect. Right from its foundation up through every part of its structure it is built for service, the principle of its design is correct, none of the materials are skimped and the manufacturing operations are most carefully performed.

The main frame is trussed like a bridge. Seldom in agricultural instrument construction do you find a frame which has the strength and rigidity of this one. Lengthwise and crosswise, it is made up of a series of high carbon steel truss-like forms, which are so arranged and united that the strength of each one is contributed to and supplemented by that of the others. Indeed, so substantially is it tied, trussed and reinforced at every supporting point there isn't the least chance of sagging, twisting or any other kind of distortion, and a positive alignment of all bearings is assured.

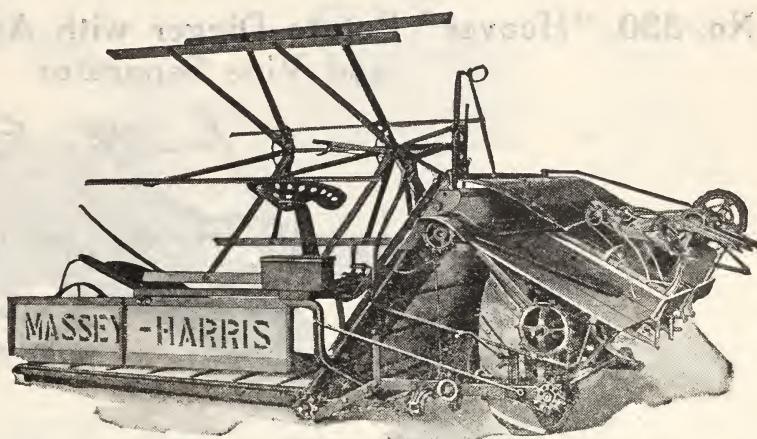
Roller and self-aligning bearings lighten the draft. Special care has been exercised to provide bearings that would insure light draft and long life. For both the main and the grain wheels, for the cross and crank shafts, and for the rollers that drive the elevators, roller bearings in cages are used. Then, in addition, self-aligning boxes are provided wherever they are of advantage, as at the rear of the crank shaft, at the sprocket end of the inner platform roller, etc. Friction is minimized at every bearing point.

Price on Application

Massey-Harris No. 3 Corn Binder



Descriptive Circular and Price on Application

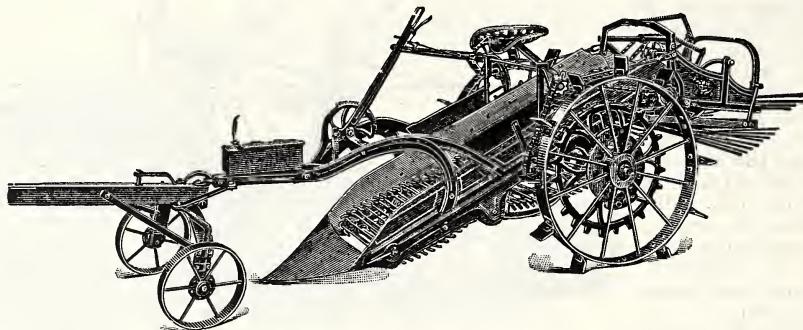


It's the only corn binder handling the stalks in an inclined position on which the knoter and needle can be raised or lowered to meet growths of different heights without stopping the machine or leaving the seat.

Whether your corn is the large, firm varieties, which stand erect, the supple, spindly kind that often become lodged, or the short growths which are mixed with grassy bottoms, this machine will harvest it to your entire satisfaction. It is of an approved type and has several exclusive features of considerable merit, outstanding among which is a wider range of adjustment for accommodating all heights and kinds of corn than is found in other machines of its class.

The Hoover Potato Digger

No. 330. "Hoover" Potato Digger with Agitating Rear Rack and Vine Separator



Selecting Your Potato Digger

There are six important points to consider when selecting a Potato Digger:

1. Efficient operation—even under difficult conditions.
2. Durability—the strength, correct design and ease of operation to assure maximum performance for the longest period of time.
3. Low maintenance cost.
4. Permanence of the manufacturer—to assure repair service during the life of the machine.
5. Reputation for good work, based on the universal approval of users.
6. Prestige of the manufacturers, as judged by the confidence their products have merited.

Those six signs of quality are generously reflected in the John Deere-Hoover Potato Diggers.

PRICE ON APPLICATION

Banner Root Cutters

NO. 20



For Hand Use

Capacity, 30 to 50 bushels per hour.

Weight, 120 lbs.

NO. 7

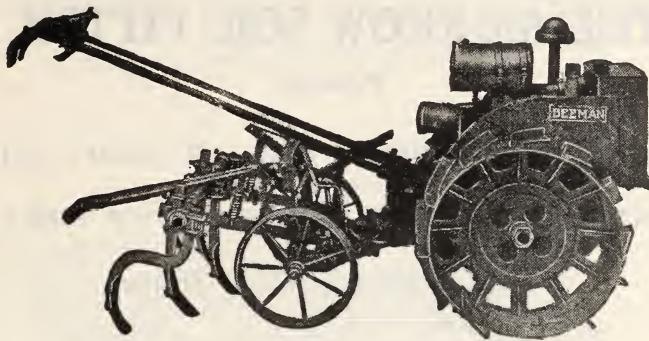


Exclusively for Poultry

It cuts fast and is easy running. Leaves the feed in fine, brittle, ribbon-like strips that make choking impossible. Fowls, large or small, can safely eat the feed. The knives are adjustable and made of the very best of steel. An iron grate in bottom of hopper lets dirt and gravel escape before reaching the knives. In this cutter we offer the poultrymen a low-priced, high-grade, nicely finished and mechanically constructed machine and feel that anyone who desires to feed roots and vegetables to their flocks can well afford to own one. Two to five minutes will cut enough feed for a large flock of birds.

Write for Quotations

AMERICA'S
PIONEER
SMALL
TRACTOR
AND
POWER
CULTIVATOR



TWO HORSE
POWER
AT THE
DRAW BAR
FOUR HORSE
AT THE BELT
S. A. E. RATING

Is Equipped, As Illustrated, for General Between the Row Cultivating

BEEMAN MULTI-SERVICE TRACTOR

BEEMAN has the Power and the Weight to handle the difficult job. Its construction permits it to care for the lighter requirements.

BEEMAN handles all crop rows 12 inches wide and wider in cultivating and sows multiple rows that are from 12 inches to 18 inches apart.

BEEMAN permits the small acreage worker to care for same fully, doing the plowing, harrowing, cultivating thereon; cut the lawn and meadows, haul in the crops, haul out the fertilizer, saw your wood or do other belt work not requiring in excess of 4 h. p.

The use of BEEMAN means Greater Efficiency, Economy, Profit, also satisfaction in being able to do well, with little effort, that which heretofore meant hard work and long hours.

BEEMAN is the PIONEER of ALL SMALL TRACTORS. It pointed the way. This means many years of improvements and insures the user a finished product.

BEEMAN is a real tractor—Timken bearings for the two main bearings on the crank shaft; ball bearings for the secondary or transmission shaft; working parts assembled in the crank case and run in a continuous bath of oil; an effective Air Cleaner protects the working parts by separating the dirt from the air prior to its entrance into the tractor.

SPECIFICATIONS—Single Cylinder, 4 Cycle, Radiator Water Cooled, Motor of the L head, vertical type, 3½" bore, 4½" stroke, 2-4 h. p.; 25" bull wheels with 3¼" tires. Tractor is 17¼" wide, outside to outside of wheel rims. Speed ¾ to 2½ miles per hour in the field. Fuel, gasoline, one gallon gives 4 hours work. Weight, approximately 550 lbs.

EQUIPMENT—Highly developed, quick change equipment is furnished for the different operations; no time lost in changing from one implement to another.

Full information is yours on request; ask for it and learn how BEEMAN will fit into your requirements.

WE HAVE IT ON DISPLAY

THE MORROW SOIL FITTER

Patented

WORKS IN WET, DRY, LOOSE, OR SANDY SOIL

GREATEST LABOR SAVING DEVICE KNOWN FOR FARMER

Made to Fit Any Wheel Tractor

Seeds Germinate Quicker

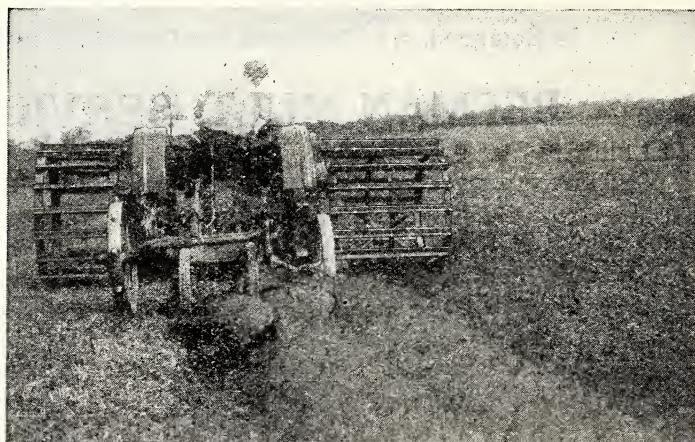
Plants Grow Faster

Crops Ripen Evenly

Fields Yield Greater When
Fitted with the

MORROW SOIL-FITTER

Breaks Lumps and Clods
and Levels Furrows



Fitting Field At No Cost While Plowing

It firms all the soil uniformly—Leaves topsoil mulched—Keeps subsoil open—Prevents tractor packing or “hard-pan”—Conserves moisture—Aids capillary attraction—Causes quick decomposition of manure or cover crops—Saves time, labor and tractor travel—Increases traction—Saves gasoline.

No Bearings to Oil—Nothing to Wear Out—Easily Attached or Removed

What safer guide can a man have in buying a farm tool than the satisfaction of the man who owns one?

“TESTIMONIALS”

Gentlemen—I have used one of your Soil Fitters for the past five years, and consider it the greatest tool I ever used on plowed ground. It does the right thing at the right time. I never plow without it. It has all the merits you claim for it. Yours truly,

John Sprankle, Milan, Ohio.

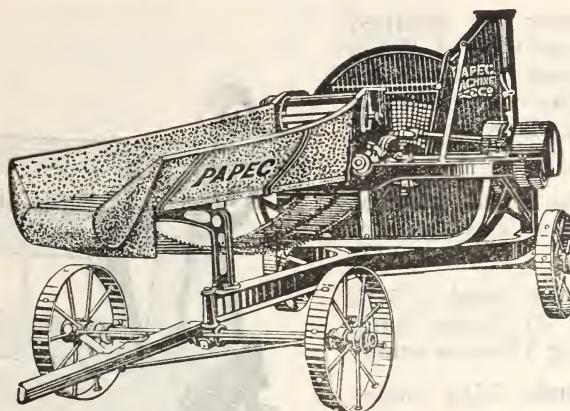
Gentlemen—Am very much pleased with my Soil Fitter. This tool effects a real saving in fitting ground. I consider it the best buy of all tractor tools. Yours truly,

Van Richards, Batavia, N. Y.

COMPLETE DESCRIPTIVE FOLDER AND PRICE ON REQUEST.

PAPEC ENSILAGE CUTTERS

Size No. 127 Illustrated



Power and labor are the two biggest cost items in silo filling. The Papec is well-known for its simplicity, light running and self-feeding qualities. One of the attractive features of the new Papec Cutters is the large steel feed table. This is a great help in the feeding of the Cutter.

Papec Cutters have semi-steel cutting wheels with a heavy steel tire shrunk around the wheel. Six fans of malleable iron are used which together with a patented blower drum adjustment, makes elevating adjustment a possibility.

Cutting knives are made of special steel. They are mounted so as to be easily removed or adjusted without danger of injury to operator.

One of the most important features of the Papec is its one-piece semi-steel main frame. This frame cannot warp or twist. All bearings are cast in, assuring permanent bearing alignment.

The self-feeding mechanism of Papec Cutters is composed of a full angle slat traveling apron, heavy cast feed rolls of one piece running between the teeth in the shear plate, an upper or third feed roll steel drum working independent of feed rolls to feed bulky material to the rolls, and shear plate of special iron chilled on cutting edge. The shear plate is easily removed without interfering with any other parts. The entire feeding mechanism is controlled by a lever whereby the feeding may be instantly reversed, stopped or thrown into forward gear.

All Papec Cutters are regularly equipped with pipe and elbow for 36-foot silo. Tilting joint of pipe is always included. Equipment also includes extra set of cutting knives and change gears for different lengths of cut. Machines may be supplied on legs or on a 4-wheel truck.

SPECIFICATIONS

	Size R With 2 Knives	No. 81 With 2 Knives	No. 81 With 3 Knives
Tons per hour	2 to 5	5 to 10	8 to 12
Horse Power, Gasoline	3 to 6	6 to 10	10 to 14
Horse Power, Electric		5 and 7½	5 and 7½
Lengths of cut, approximately	¼, ½, ¾, 1 in.	¼, ½, 1 in.	1/6, ½, ¾ in.
Revolutions per minute with Gas Power	700	650	650
Revolutions per minute with Electric Power		400	400
Throat Opening at Cutting Plate	6 ½ in. x 10 ½ in.	6 ¾ in. x 12 ¾ in.	6 ¾ in. x 12 ¾ in.
Length of Cutting Knives	12 ¾ in.	15 ½ in.	15 ½ in.
Shipping Weight, not mounted	935 lbs.	1209 lbs.	1235 lbs.
Shipping Weight, mounted	1115 lbs.	1471 lbs.	1496 lbs.

No. 127

Tons per hour—½ inch cut—14 to 20 h. p. gasoline.....	12 to 20
Tons per hour—½ inch cut—5 and 7½ h. p. electric.....	8 and 11
Length of cut.....¾, ½ and 1 inch with 3 knives; ½, ¾ and ½ with 6 knives	
Revolutions per minute.....gas power—600; electric—360	
Throat opening at cutting plate.....8 ½ x 15 in. 127 sq. in.)	
Length of cutting knives.....19 in.	
Shipping weight.....with 3 knives—1969 lbs.; with 6 knives—2018 lbs.	

No. 1 Wood Saw Frame

This is undoubtedly the greatest all round small rig ever offered. When an 18-inch blade is used it may be run with 1 H. P., but we recommend 2 H. P. Will carry a blade up to and including 22 inches.

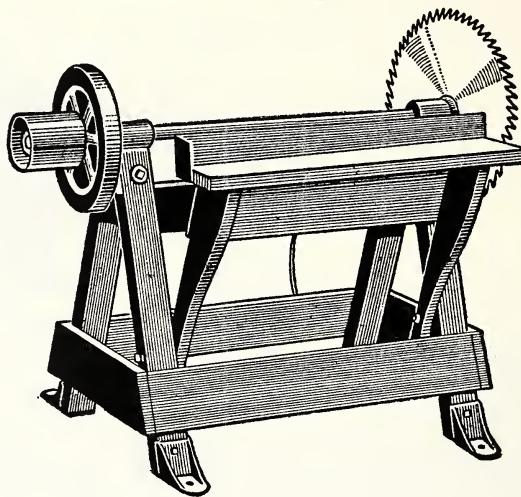
Frame—The frame is well built of good seasoned wood, securely put together.

Mandrel—Cold rolled steel 1 5-16 inches in diameter, 41 inches long. Fitted for saw having 1 $\frac{1}{4}$ -inch arbor.

Flywheel—35 pounds, 13 $\frac{1}{2}$ inches in diameter.

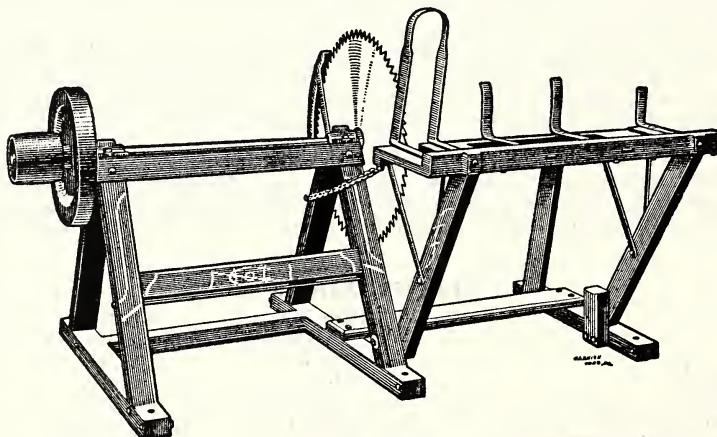
Pulley—5-inch face, 5 inches in diameter.

Boxes—Solid pattern, lined with high speed bearing metal.



PRICE ON APPLICATION

No. 1607 Wood Saw Frame With Pole Extension



This frame meets the requirements where long pole wood is to be sawed.

Mandrel—Cold rolled steel 1 7-16 inches in diameter, 49 inches long. Fitted for saw with 1 $\frac{3}{8}$ -inch arbor.

Flywheel—70 pounds, 17 inches in diameter.

Pulley—6-inch face, 6 inches in diameter.

Boxes—Split pattern, the lower half runs the length of the frame, being a part of it, making it impossible to get out of alignment with the mandrel. Having liner adjustment features. Lined with high speed bearing metal.

Price on Application

INDEX

A

Acid, sulphuric,	100
Adco,	114
Anset,	110
Antrol,	111
Aphine,	110
Arsenate of calcium,	108
Arsenate of lead,	108
Ashes,	48
Atomizers,	115, 116-117
Augurs, post,	64
Axes,	52

B

Bag Balm,	105
Balls, ox,	52, 106
Bands, poultry leg,	86
Barrels, galv. iron ash,	70
Bars, crow,	52
Basins, stanchion,	127
Baskets,	67
Baskets, berry,	67
Baskets, iron,	52
Bells, cow,	106
Binders, grain and corn,	169
"B-K,"	93, 99
"Black Leaf 40,"	90, 110
Blowers, ensilage,	173
Boilers, wash,	72
Bone, ground,	48
Books on rural topics,	45
Bordeaux Mixture,	110
Bottles, Babcock test,	100
Bottles, milk and cream,	98
Bowls, water,	127
Bowls, wood,	106
Boxes, bottle,	98
Boxes, butter,	104
Boxes, day old chicks,	87
Boxes, egg shipping,	86
Boxes, oak-ball,	104
Boxes, self-feeding poultry,	82
Boxes, window,	46
Brackets,	52
Brooders,	77, 79
Brooms,	52
Brushes, can and bottle,	52, 98
Buckets, well,	64
Bug Death,	109
Bug Death, Alpha,	109
Bulbs,	17

C

Cages, bird,	65
Candles, sulphur,	91
Cans, creamery,	102
Cans, milk,	102
Cans, oil,	72
Caps, bottle,	101
Carbola,	91
Carriers, egg,	86
Carriers, butter,	99
Carriers, hay and supplies,	167

D

Destroyer, Red Mite,	89
Diggers, potato,	170
Dilators, wax teat,	106
Distributor, fertilizer,	133, 152
Doors, screen,	68
Drags,	123
Drag heads,	123
Drills, grain and fertilizer,	152
Drills, seed,	130-133
Dryers, clothes,	68
Dryers, wall,	68
Dusters, B-D,	112
Dusters, Dickey,	112
Duster, double tube,	112
Dusters, Feeny,	112
Duster, orchard,	121
Dusting material,	109

E

Egg-O-Hatch,	86
Engines, gasoline,	159
Equipment, barn,	126, 127
Ever Green,	112
Expander, teat,	106

F

Fasteners, tub,	104
Feeders, automatic poultry,	82
Feeders, chick,	82, 83, 85
Feeders, calf,	105
Feeders, poultry,	91

Carriers, litter,	126
Carriers, milk bottle,	98
Cases, egg,	87
Catchers, grass,	53, 59
Cel-o-glass,	93
Chemicals,	48
Chains, auto,	149
Chisels, grafting,	53
Choppers, food,	73
Churns, wood butter,	96
Clamps, freezer,	74
Coasters,	75
Cold Soder,	63
Color, butter,	101
Compound, "K. & W." Sweeping,	69
Coolers, milk,	103
Corn, "K. & W." popping,	66
Covers, flower pot,	47
Crates, poultry shipping,	87
Creosote,	110
Crow Repellant,	110
Cultivators, garden,	129-132
Cultivators, riding,	159
Cultivators, walking,	157-158
Cushions,	87
Cutters, ensilage,	173
Cutters, root,	170
Cyanogas,	110

G

Gates, wire,	58
Gauge, incubator, moisture,	80
Germozone,	88
Gizzard Capsule,	88
Glass Cloth,	91
Glass ware, creamery,	100
Gloves, cotton,	53, 72
Glue,	63
Grease, axle,	52
Grindstones,	53, 62
Guard, wire flower bed,	53, 58

H

Hammers, nail,	54
Handles,	53
Hangers, barn door,	161
Harrows,	145-151
Headers, barrel,	63
Heads, pulp,	63
Heaters, brooder,	77
Heaters, Radiant,	50
Heater, Ready-glo,	50
Hellebore,	110
Hods, coal,	70
Hoes, garden,	54, 130, 131
Hoes, potato,	158
Holders, bouquet,	52
Hooks, grass,	53
Hoppers, poultry feed,	82
Hose, garden,	53
Hot Caps,	113
Hovers, coal burning,	79

I

Ice plows,	94
Ice tools,	94
Incinerator,	62
Incubators,	77, 78
Insecticides,	108-111
Insecticides, Sherwin-Williams,	108

J

Jars, fruit,	75
--------------------	----

K

Kampkook,	50
Kalco,	108
Kegs,	64
Kettles, tea,	72
Killer, cut worm,	110
Killers, lice,	89
Killer, poultry,	89
Killers, weed,	111
Knives, asparagus,	52
Knives, bread,	63
Knives, edging,	52
Knives, hav,	54, 65
Knives, poultry killing,	80
Knives, pruning,	54
Kow Kare,	105
K-R-O,	107

L

Labels, pot and tree,	54
Lactometers,	100
Ladies, butter,	104
Lanterns,	50, 97
Lime,	48
Lime Sulfur,	108
Liners,	63
Lines, garden,	52
Loaders, hay,	168
Louse-Chase,	90

M

Machine, butter-making,	73
Maker, bread,	73
Mangers, iron,	65
Manure, sheep,	48
Markers, poultry,	89
Mattocks,	54
Meal, calf,	92
Measures, wooden,	66
Measures, acid,	100
Menders, hose,	53
Milk, dried skim,	92
Mixers, concrete,	161
Mixer, cod liver oil,	93
Moulds, butter,	95
Mowers, field,	162, 164
Mowers, lawn,	59-61
Mulch, paper,	113
Muzzles, ox,	106

N

Nests, hen's,	85, 89
Nettings, poultry,	76
Nico-Fume,	110
Nitragin,	21
Norcross hoe,	54
Nozzles, hose,	53

O

"O-Cedar,"	69
Oil, cattle,	114
Oil, cod liver,	93
Oil, Sunoco,	109
Openers, can,	63
Outfit, direct pumping,	117
Outfit, milk fever,	106
Oxo Bordeaux,	109

INDEX

P

Pads, strainer,	102
Paddles, butter,	104
Pails, cream,	102
Pails, dinner,	72
Pails, galvanized iron,	70
Pails, garbage, galv. iron,	70
Pails, milk,	103
Pails, milk strainer,	103
Paint, page 3 of cover	
Paper, butter,	103
Parcel Post rates, page 2 of cover	
Parers, apple,	73
Parowax,	75
Paris Green,	108
Peat,	92
Phosphate,	49
Picks,	54
Pickers, blueberry,	66
Pickers, fruit,	52
Pipettes,	100
Planters, corn,	153-155
Planters, potato,	153-154
Plants,	16
Plaster,	48
Plows, ice,	93
Plows, road and grading,	139, 143
Plows, sulky,	135, 136, 140
Plows, tractor,	135-136
Plows, walking,	137, 138, 141-144
Plugs, test,	106
Points, drive well,	123
Points, glazing,	53
Pomo-Green,	111
Poppers, corn,	66
Posts,	58
Pots, flower,	47
Poultry supplies,	76-92
Powder, worm,	90
Probe, test,	106
Pruners,	55
Pulleys, hay fork,	167
Pumps, hand force, pitcher, power,	123-125
Pumps, spray,	118-120
Pumps, vinegar,	69
Pumps, wooden well,	64
Puttum,	65
Pyrox,	110

R

Racks, feed,	65
Racks, hose,	53
Raffia	55
Rakes, dandelion,	61
Rakes, garden and lawn,	55, 61
Rakes, horse,	164-166-168
Rakes, side delivery,	168
Rat Nip,	107
Rat Tox,	107
Red Wing Powder,	107
Reels, garden,	53
Reels, hose,	53
Refrigerators,	73
Regulator,	90
Relief, Cow's,	105
Remedies, Pratt's poult try,	81
Remedy, garget,	105
Respirators,	112
Rings, bull,	52, 106
Rings, fruit jar,	75
Rollers, land,	148
Rollers, lawn,	61

S

Salt, Worcester,	176
Saw mandrels,	174
Saws, ice	94
Saws, pruning,	55
Saws, wood,	55, 174
Scales, dairy,	107
Scales, family,	107
Scales, platform,	107
Scalcide,	110
Scooters,	75
Scrapers, road,	123
Screens, window,	68
Scythes,	55
Scythe stones,	55
Seeds, bird,	65
Seeds, flower,	4-16
Seeds, grain and forage,	42, 43
Seeds, herbs,	42
Seeds, lawn,	44
Seeds, vegetable,	18-42
Seeders, garden,	130-133
Seeders, grass and grain,	129

T

Seedlings,	16
Semesan,	20
Separators, cream,	95
Sets, caponizing,	80
Sets, croquet,	51
Settees, lawn,	51
Shears, border,	52
Shears, grass,	53, 61
Shears, hedge and pruning,	53, 55, 56
Shears, sheep,	56
Shovels,	56, 64
Sidewalk Cycles,	75
Sifters, ash,	70
Skis,	75
Sleds,	75
Snarol,	111
Snaths,	55
Snowshoes,	75
Soap, fish oil,	110
Soiltex,	113
Sowers, grass and grain,	129
Sowers, lime,	152
Spray Boom,	119
Sprayers,	115 to 122
Spreaders, manure,	160, 162
Sprinklers, garden and lawn,	56
Sprouters, oat,	88
Stanchions, cattle,	127
Stands, plant,	47, 114
Stakes, plant,	46
Stimugerm,	21
Stone ware,	69
Stoves,	50, 77
Strainers, milk,	101, 102
Stretchers, wire fence,	90
Sulfocide,	110
Sulphur,	110
Sunoco,	109
Supplies, bird,	65
Supports, plant,	46
Swings, lawn,	51

T

Tables, seed, drill and acre,	22, 45
Tablets, plant,	46
Tablets, rennet,	101
Tanks, oil,	72
Tedders, hay,	165
Testers, egg,	80

V

Van's,	66
Vapo-Spray,	88
Velocipedes,	75
Ventilators, window,	68
Vigoro,	49
Volck,	111

W

Wagons, coaster,	75
Washers, clothes,	71
Water Glass,	88
Water system,	128
Wax, bees,	114
Wax, grafting,	114
Weaners, calf,	105
Weeders,	57, 129, 157
Wheelbarrows,	57
Workers, butter,	97
Wringers, clothes,	71
Wringers, mop,	71
Wyandotte,	101

FLY-TOX IS CLEAN

FLY-TOX is one of those steps in human progress that makes one stop and wonder—"What Next!"

In olden days flies and other insects were tolerated. Later the poison paper, sticky fly paper and insect powders came into use.

Now we have the method that is safe and sure. It is harmless to humans and animals. It will not stain the finest of fabrics. It has a pleasant odor. It is the FLY-TOX WAY!

Spray a cloud of FLY-TOX into the room. It kills house-hold insects within ten minutes. FLY-TOX is clean. It leaves no muss or dirt. FLY-TOX is bottled in convenient sizes.

PRICES:

1/2 Pt., 50c. 1 Pt., 75c. 1 Qt., \$1.25 1 Gal., \$3.50

WORCESTER SALT

FOR DAIRY OR TABLE
The standard of quality, WORCESTER SALT is still the leading brand, as it has been for a generation. It is used by everybody who wants the best. Its PURITY, CLEANLINESS, STRENGTH and FLAVOR have never been equalled. WORCESTER SALT is unrivalled for butter. Send for our booklet "Butter Making on the Farm." Free on request.

WORCESTER SALT FOR PACKING MEAT

WORCESTER SALT turns out better pork, sweeter hams and bacon than any other salt. A trial will convince you. Send for our booklet "Curing Meats on the Farm."

IVORY FREE RUNNING SALT

is the last word for those who prefer a specially prepared salt for use in shakers. It is the saltiest free running salt known and comes in the best package on the market, a moisture proof carton with cover and spout.

BEST PAINT SOLD



“LOOK INTO IT”

TRADE MARK REGISTERED

Kendall & Whitney

Federal & Temple Sts.,

Portland, Maine



Seeds
Poultry Supplies
Dairy Supplies
Fertilizers
Plows
Harrows
Seeders
Mowers

Rakes
Ensilage Cutters
Haying Tools
Wheelbarrows
Shovels
Hoes
Baskets
Bird Cages

Gasoline Stoves
Skis
Sleds
Plant Stands
Flower Pots
Stoneware
Tires
Tire Chains